

# BUSINESS WEEK

WHAT IS THE  
**Fighting Strength**  
OF THE U.S. TODAY?  
PAGE 22



Hazel Bishop: Her lipstick business can't be kissed off (page 42)

A MCGRAW HILL PUBLICATION

MAR. 17, 1951

TWENTY FIVE CENTS



# Chemical Progress

News of developments from General Electric's Chemical Department that can be important to your business.

## New High-Strength G-E Silicone Rubber Compounds Offer Important Advantages to Fabricators and Their Customers

Heat resistance and improved mechanical strength now make both new and better products possible.

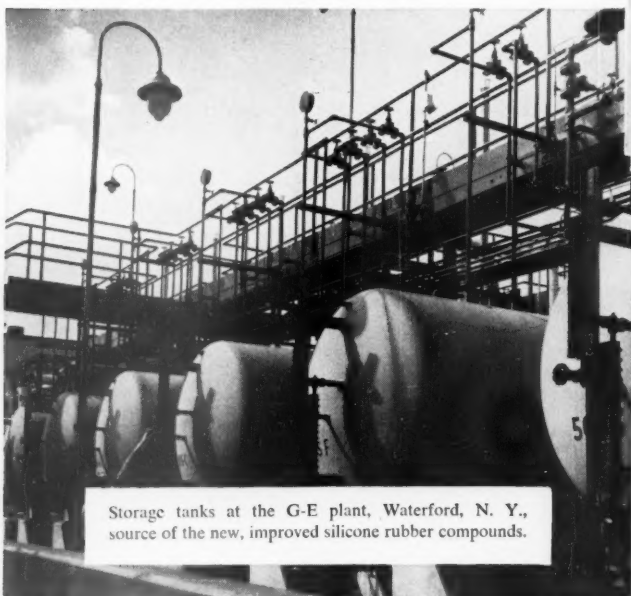
A new line of General Electric silicone rubber compounds now offers rubber processors and fabricators an unusual opportunity to make parts impractical to produce with previous silicone rubber compounds.

These new compounds combine high-temperature resistance with improved mechanical strength. They enable rubber manufacturers not only to improve present products, but to develop new and different ones

with profitable sales possibilities. The excellent molding and extrusion characteristics of these new compounds make the production of even intricate parts easy.

### Customers to Benefit

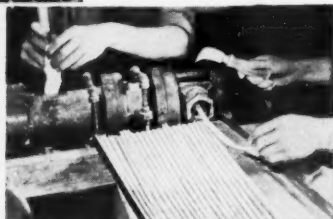
Customers of rubber processors and fabricators will also benefit from the new high-strength compounds. Now they can expect to find silicone rubber in products where it was not possible before. Buyers should specify the new G-E silicone compounds in the parts or equipment they order.



Storage tanks at the G-E plant, Waterford, N. Y., source of the new, improved silicone rubber compounds.



A wider range of temperatures (-85 to 500F) can be withstood by products made of the new General Electric silicone rubber compounds. Sealing gaskets for oven doors, for example, will not soften, harden or stick even under intense heat.



Fabricators find the excellent hot strength of these new compounds means simplified handling techniques and shortened production cycles. Low specific gravity and neutral color are added advantages. Bonding is simple with G-E adhesives and primers.

For more information about G-E silicone rubber compounds or other chemical products, write to Chemical Department, General Electric Company, Pittsfield 12, Mass.

PLASTICS COMPOUNDS • SILICONES • INSULATING MATERIALS • GLYPTAL® ALKYD RESINS • PLASTICS LAMINATING, MOLDING, AND EXTRUDING

*You can put your confidence in*

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## "The Voice With a Smile"

Whenever you pick up the telephone and talk to the operator you know you are going to hear a friendly, cheery voice. For years the telephone operator has been known as "The Voice With a Smile."

But she is ever so much more than that. Alert, intelligent, resourceful and sympathetic in emergencies, she has become the national symbol of efficient attention to the customer's needs. She brings

experience and careful training to the job. Hers is the calm, sure speed that comes from knowing how.

In saying a good word for the telephone operator, we would like to say a good word for you too. For it is your courtesy that helps her to be courteous. One good turn has a way of encouraging another. Everybody gets better service when there is co-operation all along the line.

*Seventy-five years of service to the Nation, 1876-1951...BELL TELEPHONE SYSTEM*





ASBESTOS

PRODUCTION EXECUTIVES, TOO,

*Favor*

THESE FLEXIBLE INTERIORS

"Our Asbestos Movable Walls are just as practical out in the plant as in the main office," say management men. And the "Universal" type require no critical war materials in their fabrication or erection.

**I**F YOU HAVE a problem concerning rapid industrial expansion for military defense or to meet civilian demand, investigate the time-saving, money-saving advantages of Johns-Manville Asbestos Movable Walls.

In this time of national emergency, we call particular attention to the *Universal* type of J-M Transite® Movable Wall. It uses no critical war materials, thus gives you more freedom to plan your construction schedule with confidence. Take advantage of prompt installation, no shortage delays.

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*Universal* type movable walls may be erected as ceiling-high or free-standing partitions and railings, either solid or with glass. Ideal as interior finish for outside walls.

The complete Johns-Manville wall, including doors, windows, and hardware, is installed by Johns-Manville; you get undivided responsibility.

An estimate will convince you that the cost of J-M Asbestos Movable Walls compares favorably with that of other types of wall construction.

• • •

For details or an estimate (without obligation, of course), write Johns-Manville, Box 158, Dept. BW, N. Y. 16, N. Y.

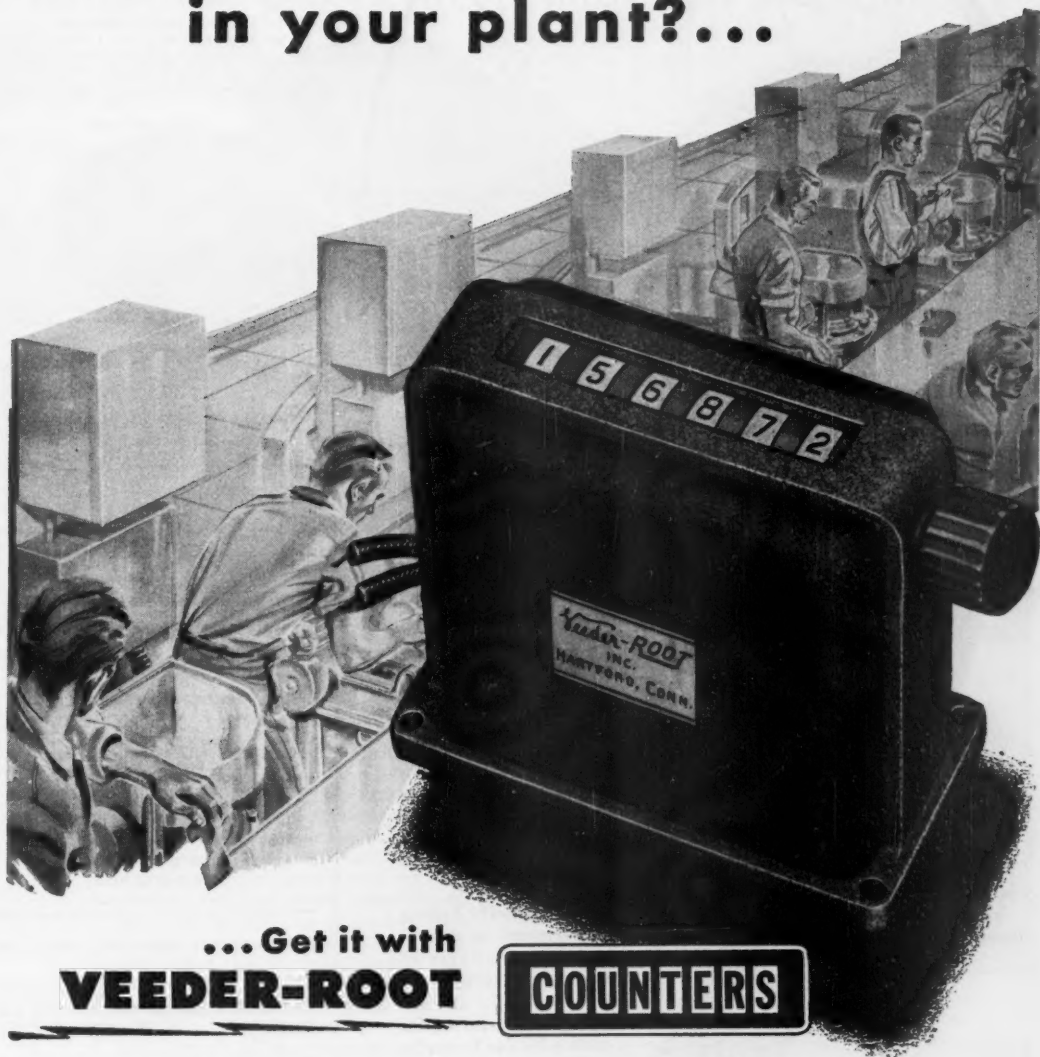
• Reg. U. S. Pat. Off.



*Johns-Manville Movable Walls*

— INSTALLED NATIONALLY BY JOHNS-MANVILLE —

# Need an "Information Center" in your plant?...



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**COUNTERS**

Every production machine you use can be made to "report to headquarters" . . . by flashing figures a few feet or many miles to Veeder-Root Magnetic Counters group-mounted on a central board.

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**CUT COSTS**—specify Belden Wire. Our engineers can demonstrate these advantages of "wiring right." Investigate, today.

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in Belden  
Hook-up Wire

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WIREMAKER FOR INDUSTRY

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BUSINESS WEEK • MARCH 17 • NUMBER 1124

(with which are combined The Annalist and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder • *Publication Office*, 99-129 North Broadway, Albany, N. Y. • *Editorial, Executive and Advertising Offices*, 330 West 42nd St., New York 18. • *Curtis W. McGraw*, President; Willard Chevalier, Executive Vice-President; Joseph A. Gerardi, Vice-President and Treasurer; John J. Cooke, Secretary; Paul Montgomery, Senior Vice-President, Publications Division; Ralph B. Smith, Editorial Director; Nelson Bond, Vice-President and Director of Advertising.

*Subscriptions*: Address correspondence regarding subscriptions to J. E. Blackburn, Jr., Vice-President and Director of Circulation, Business Week, 99-129 N. Broadway, Albany 1, N. Y., or 330 West 42nd St., New York 18. Allow ten days for change of address.

Subscriptions to Business Week are solicited only from management-men in business and industry. Position and company connection must be indicated on subscription orders. Single copies 25c. Subscription rates—United States and possessions \$6.00 a year; \$12.00 for three years. Canada \$7.00 a year; \$14.00 for three years. Pan American countries \$10 a year; \$20.00 for three years • All other countries \$20 a year; \$40.00 for three years • Entered as second class matter Dec. 4, 1936, at the Post Office at Albany, N. Y., under Act of Mar. 3, 1879 • Printed in U.S.A. Copyright 1951 by McGraw-Hill Publishing Co., Inc. All Rights Reserved.

BUSINESS WEEK • Mar. 17, 1951



# What's U. S. Rubber doing to bridge the gap between hard and soft rubber?

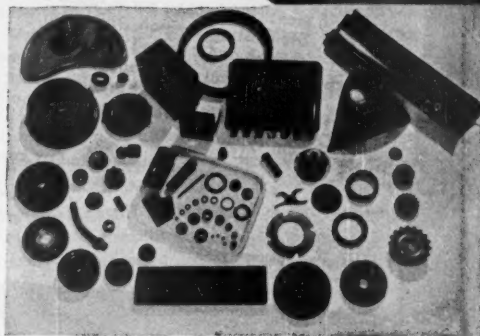


Washing machine parts, formerly made of plastic and metal, now made of new thermosetting plastic, Enrup, which has higher abrasion resistance and is structurally stronger.

The new "U.S." thermosetting plastic, Enrup, can be made flexible and elastic as soft rubber, or rigid as hard rubber. Enrup offers entirely new possibilities to design engineers. The washing machine parts, shown above, are made of Enrup because its abrasion resistance and structural strength are greater than the combination of metal and plastic formerly used.

Enrup can be made into almost any shape or form, simple or complex. It can be punched, sanded, sawed, nailed, bolted, molded and machined. Perhaps Enrup is just what you've been looking for to improve your product or your manufacturing operation.

For more details, write to address below.



Some of the products made of Enrup for leading manufacturers. The smallest items weigh as little as one-third of an ounce. Engineers often find Enrup cuts molding costs, permits operating economies hitherto impossible.

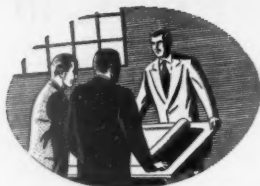
Note how a bath of 20 percent solution of sulphuric acid eats away the steel gear at left, while the Enrup gear is unharmed. Enrup is non-conductive, non-absorbent, easy to clean, is noiseless.



PRODUCT OF



UNITED STATES RUBBER COMPANY  
MECHANICAL GOODS DIVISION • ROCKEFELLER CENTER, NEW YORK 20, N. Y.



## What an Appliance Maker learned from an Automotive Specialist about DIE CASTING...

**B**UILDING appliances was an old story to a well-known manufacturer but he knew the reputation of the automotive industry for getting quality products at low cost. He figured that any firm with the know-how to serve the car-making industry might be able to show him ways to improve quality and save money doing it. So when a rather unusual die casting and plating requirement came up, he got in touch with the Auto-Lite Die Casting Division. The result was an improved casting and a saving in money, too.

If you have a die casting requirement in which quality or price is a problem, or if you need the help of Auto-Lite's famous design and engineering experts, write to

THE ELECTRIC AUTO-LITE COMPANY  
Die Casting Division

Woodstock, Illinois • Lockland, Ohio

600 So. Michigan Ave. 723 New Center Bldg.  
Chicago 5, Illinois Detroit 2, Michigan

die castings  
plastics  
wire and cable  
industrial  
thermometers

## Highlights In This Issue

### Cold-Hearted Bankers

• That's how it's going to look to most businessmen. Loans'll be harder to get, more expensive. P. 19

### Something for Everybody

• Making sure of it is Weiss' mobilization job. P. 21

### OPA Never Dared

• But OPS has had the foolhardiness to put a ceiling on a farm price. How come? P. 25

### Nicer in the Suburbs

• A lot of New York companies think so and are heading for Westchester County. P. 79

### Wonderful—But

• You could do great things with reinforced plastics—if you had the stuff and knew how. P. 88

### The Trouble With Banking...

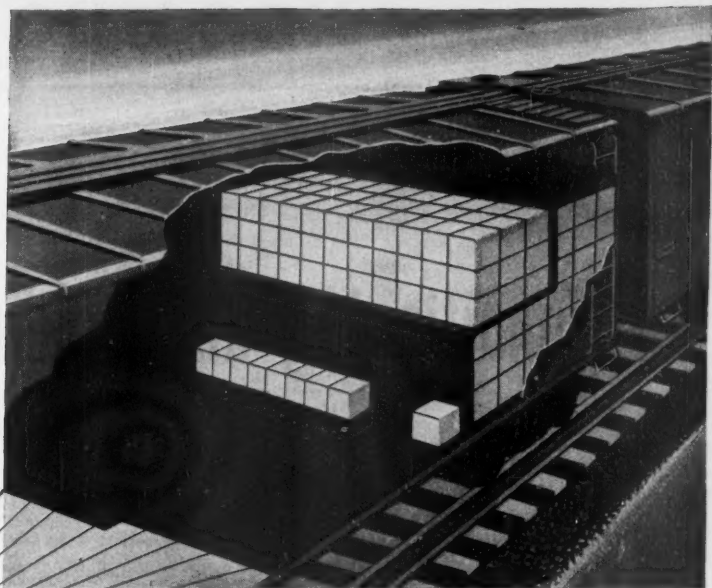
... they say in Syracuse, is bankers. Reason: the fancy performance a non-banker has turned in. P. 118

### Rough, Nasty—and Effective

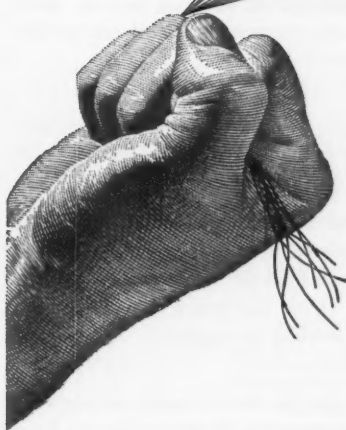
• It took AFL dockworkers to run the Reds out of European ports. P. 148

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**Shock absorber made of paper.** Sudden stops and starts can smash cargo piled at the very end of a freight car. However, when the entire end of the load is bound into a unit by hundreds of threads of "Cordura" laminated between sheets of paper, it acts like a shock absorber . . . substantially reducing breakage.



## It often costs less to use this Du Pont yarn

The extra strength of Du Pont Cordura® High Tenacity Rayon makes it possible to replace large cords of natural fibers with smaller gauge cords of "Cordura" yarn. In this way you can reduce the size of a strength section, and also the amount of carcass required . . . often making your product better, and less expensive.

This is why "Cordura" is used to make conveyor belts thinner yet stronger, hoses lighter yet safer, tires that are cooler running, and V-belts that are smaller and more efficient.

Just as the extra strength of "Cordura" is the backbone of these improvements, its extra strength may be useful to you, no matter where you use yarns in your business . . . *and without increasing cost.*

\*REG. U. S. PAT. OFF.

# Du Pont "Cordura" High Tenacity Rayon

**STRENGTH AT LOW COST**

*for RAYON . . . for NYLON . . . for FIBERS to come . . . look to DU PONT*

**WRITE NOW FOR THE FREE BOOKLET "Sinews for Industry."** It gives physical properties of "Cordura" . . . tells you how Du Pont will help you benefit from the advantages of "Cordura" Rayon. Address: Rayon Division, Room 4421, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY

Name

Company

Address



# Air conditioning and production

The fear of war is hanging over our heads. And the free world hopes that America's growing strength will end this threat.

That is the challenge and the opportunity. To meet it, America must produce *faster, better, cheaper*.

Carrier can do something about this. For in World War II — and in the breathing spell that followed — air conditioning proved itself as a production tool.

In airplane engine factories, air conditioning prevented the expansion and contraction of metals — helped make finely tooled parts fit exactly.

In electronics plants, air conditioning assured the microscopic precision required for guided missiles, radar and bombsights.

In drafting rooms, air conditioning increased output — reduced the number of damaged drawings.

The air conditioning of whole plants stepped up production, in both quantity and quality. Men and machines became more efficient.

Today in America vast assembly lines are being brought into operation. And at critical points along these lines, air conditioning will help turn out goods *faster, better, cheaper*. Carrier is at work now on that assignment.

But American industry is something more than great big companies. Thousands of small factories must produce the parts which will feed the final assembly lines.

Many of these will need air conditioning — and quickly. The answer to this problem is Carrier "packaged" air conditioners. They can be obtained on short notice. Their installation is a simple job. Frequently, duct work is not needed.

These units may be installed singly or in groups. Actually, batteries of Carrier Weathermakers are being used right now to air condition a wide variety of production areas, including factory offices.

Air conditioning can help you produce *faster, better, cheaper*. Consult the Carrier dealer in your city. He is listed in the Classified Telephone Directory.



AIR CONDITIONING • REFRIGERATION



# BUSINESS OUTLOOK

BUSINESS WEEK  
MARCH 17, 1951



The upward pressure on prices hasn't ended. The recent flattening out is largely temporary. Three major price-raising factors are still hard at work:

Wages—The price of getting labor back into the Wage Stabilization Board will be a further retreat from a strict wage ceiling.

Arms—Events in Korea may take some of the urgency out of arming, but won't reduce the program. Spending will pump up the money supply.

Agriculture—The "farm-price escalator" will continue.

•  
Temporary factors are, of course, retarding prices now. Korean successes are reducing the urgency of consumer demand. The old Mar. 15 feeling of poverty is upon us. The government, for now, has a big surplus.

These happen to coincide with an important change in credit policy—Treasury agreement with the Federal Reserve to make money harder to get.

This credit policy isn't just a matter of jiggling the interest rate. Raising that a fraction of 1% doesn't stop borrowing if a businessman can see a profit in asking for a loan. It's a matter of actually clamping on some kind of lid.

•  
Living costs right now aren't rising like they did for three months.

This won't be officially confirmed for some time. The February index number, yet to be completed, will show another relatively sharp rise.

But the March figure, data for which were being gathered this week, will go up very little. A flattening out in food prices is the reason.

•  
No leveling off in manufacturing costs has been seen up to now.

The average price of a broad list of industrial materials has advanced every single week this year. In fact, it has set a new high in every week save one since early last August.

The rise, since Korea, amounts to 22%. And most of these products are factory raw materials or component parts.

•  
Food prices, for all the talk about them, aren't pushing up at wholesale so vigorously as industrial materials. Food's rise in the last nine months amounts to 16%.

The war news is taking the edge off consumer demand. And the prospect of big crops, just a few months off, dulls the collective appetite.

•  
One good bet: Large crops in 1952 won't create any serious surpluses. Even if we didn't have to feed a fighting army in Korea much longer, we'd still have to feed a lot of Koreans a good while.

And we're depleting our granary feeding Yugoslavia and India.

•  
There's a lot of talk about inventories: The highest level ever . . . up more than \$9-billion in seven months . . . too many hold too much.

Actually, though, inventories haven't kept up with wholesale prices.

The value of all business inventories now is \$63.4-billion, the Dept. of Commerce finds. That's up 17% from the pre-Korea level. In the same period, wholesale prices have risen more than 20%.

Of course, prices aren't an exact yardstick. Unit inventories are up—but not so much as you might have thought.

•  
Most bothersome phase of the inventory situation is the growth at the

# BUSINESS OUTLOOK (Continued)

**BUSINESS WEEK**  
**MARCH 17, 1951**

wholesale and retail level. Normally, these stocks are built up before Christmas, go down from November to January.

But, over this last yearend, the normal failed to happen.

Wholesalers added \$600-million to the value of their stocks from November to January. And retailers added a like amount.

And these figures are adjusted for the usual seasonal variations. If you simply use the raw dollar figures, the gains are much larger.

•  
Manufacturers have had to turn out a huge volume of stuff to satisfy wholesale and retail demand.

Value of all factory sales averaged \$16.8-billion monthly in 1949. This had risen to almost \$20-billion a month just before Korea. During the consumer buying rush last August, a new peak was set at \$22.8-billion.

This record fell before January's whopping \$23.3-billion.

•  
Factory inventories, high as they are, no more than keep pace with sales. Just before Korea, inventories were running  $1\frac{1}{2}$  times the value of shipments. And the ratio in January of this year was exactly the same.

•  
Just how sound inventory accumulation has been will be told, in some measure, in the next couple of weeks.

Easter this year falls on Mar. 25; last year it was on Apr. 9.

If store sales this week and next were to show anything less than smart gains, they would be very disappointing. We will be comparing the two weeks directly before Easter with the third and fourth weeks before the holiday last year.

Moreover, the two weeks after Easter this year are bound to show big declines; they will be compared with the two pre-Easter weeks of 1950.

•  
Textile people are holding their breath to see how Easter goes.

Their worries have been growing for weeks. Overbuying is seen at various levels. New sales have been hard to close—all the way from mill to store. And now mills are being begged to hold back deliveries.

•  
One sure thing: A good many textile mills, threatened with strikes, aren't nearly so much worried about being closed down now as they would have been a while back when there was no end to new orders.

•  
Booming business spreads purchasing power—and if people spend the money, they help to keep the boom rolling.

This hen-and-egg process has rarely been more evident than now.

Total personal income has fallen off a bit from the December peak. But the decline is limited to dividends paid to individuals (which went through the roof in December).

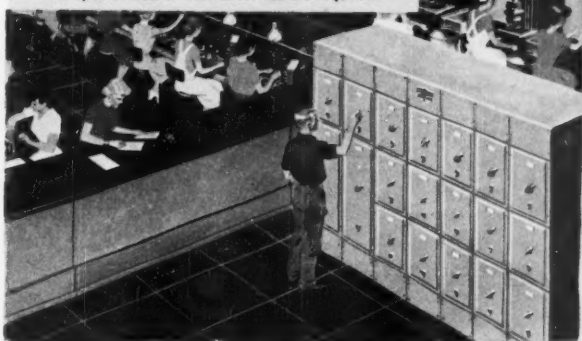
Other income items—notably wages and farm receipts—keep right on going up. And the over-all level is close to a \$240-billion annual rate.

•  
Two industries that were supposed to be on the downgrade long before this—housing and autos—go merrily along. Car and truck output is above an 8-million-unit annual rate; home building is even with a year ago.

# Tomorrow's motor control today

## Easier to install...

The motor control for a single machine, a group of machines, a department, or an entire factory may be consolidated in a compact Unitrol installation. Trim. Safe. Convenient. Economical. No special wall or floor structures are required.



## Easier to modify...

When changing production requirements force replacement, rearrangement or relocation of controls, Unitrol allows such changes without waste of time and materials. Being completely standardized, Unitrol may be expanded or reorganized repeatedly.



## Easier to maintain...

Unitrol's compact grouping of controls that are usually so widely scattered makes inspection safer, more convenient, more certain of regular attention. Control equipment housed in Unitrol is safe from mishap, tampering, and abuse.

In the few years since Cutler-Hammer engineers introduced Unitrol, the first standardized flexible control center, it has been applied to almost every conceivable motor control need. The list of Unitrol users today reads like a roster of America's leading industrials. Not many developments which completely revise existing practice win the quick acceptance and tremendous popularity that have been accorded Unitrol. It must be better!

Unitrol is better. First, Unitrol simplifies the planning of any required motor control installation. Its dimensions are known and its layout can be made part of the floor plans. Its cost

The name **UNITROL** is a Cutler-Hammer trade mark registered in the United States Patent Office. It identifies the genuine and original standardized flexible control center, an outstanding engineering achievement pioneered by Cutler-Hammer, Inc.



can be estimated accurately. Next, Unitrol saves time and expense in installation; no special wall or floor preparation is required; no tedious, costly mounting and wiring of varying sized enclosures. And finally, in operation, Unitrol provides uncluttered space about machines for operators and materials handling; simpler, safer, tamperproof pushbutton control; inspection so convenient it is not neglected. Unitrol is the motor control of the future... tomorrow's motor control today! **CUTLER-HAMMER, Inc.**, 1275 St. Paul Avenue, Milwaukee 1, Wisconsin. Associate: Canadian Cutler-Hammer, Ltd., Toronto.

# new kind of truck

*Offers every business  
unprecedented delivery efficiency*



**THOUSANDS OF OWNERS**... in all lines of business, large and small... have proved how extra profitable the White 3000 is in service. And drivers prefer it overwhelmingly. Functional design gives it passenger car driving ease in traffic. Lower frame

height makes loading and unloading easier, quicker. The driver enters and leaves the cab in an easy motion. Years ahead, the design of the White 3000 saves costly time on every trip—enough to measure in tangible dollars at the end of every day.

*Ask your White Representative for a demonstration in your service*

**THE WHITE MOTOR COMPANY**

Cleveland 1, Ohio, U. S. A.

THE WHITE MOTOR COMPANY OF CANADA LIMITED

Factory at Montreal

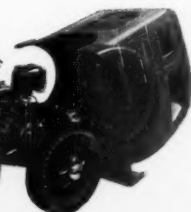


**FUNCTIONAL DESIGN** adds payload without increasing overall length... saves driving and maneuvering time.

**LOW LOADING** height because of new frame design saves delivery time... saves driver time and energy.



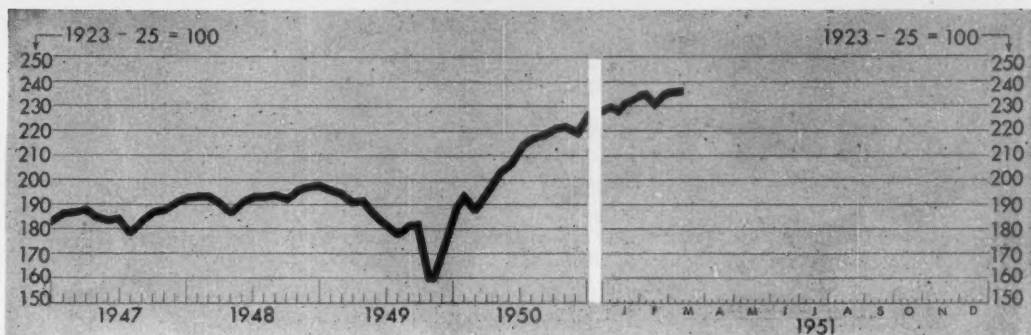
TIPS ITS CAB TO SERVICE



**FOR MORE THAN 50 YEARS THE GREATEST NAME IN TRUCKS**



# FIGURES OF THE WEEK



## Business Week Index (above) . . . . .

### PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
Steel ingot production (thousands of tons).....	2,001	2,019	1,969	1,712	1,593
Production of automobiles and trucks.....	180,232	†177,356	116,020	124,563	98,236
➔ Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$45,895	\$47,444	\$56,357	\$34,200	\$19,433
Electric power output (million kilowatt-hours).....	6,795	6,822	6,957	5,937	3,130
Crude oil and condensate (daily average, 1,000 bbls.).....	6,047	6,016	5,861	4,827	3,842
Bituminous coal (daily average, 1,000 tons).....	1,853	†1,682	1,569	530	1,685

### TRADE

Miscellaneous and L.c.l. carloadings (daily average, 1,000 cars).....	81	76	66	68	86
All other carloadings (daily average, 1,000 cars).....	50	46	42	27	52
Money in circulation (millions).....	\$27,219	\$27,188	\$27,125	\$27,105	\$9,613
Department store sales (change from same week of preceding year).....	+18%	+24%	+3%	None	+17%
Business failures (Dun & Bradstreet, number).....	153	170	191	221	228

### PRICES (Average for the week)

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	524.1	525.9	532.5	356.1	198.1
Industrial raw materials, daily index (U. S. BLS, Aug., 1939 = 100).....	372.3	†378.6	379.4	219.1	138.5
Domestic farm products, daily index (U. S. BLS, Aug., 1939 = 100).....	412.5	411.2	416.0	305.1	146.6
Finished steel composite (Iron Age, lb.).....	4.131¢	4.131¢	4.131¢	3.837¢	2.396¢
Scrap steel composite (Iron Age, ton).....	\$43.00	\$43.00	\$43.00	\$27.92	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	24.500¢	24.500¢	24.500¢	18.500¢	12.022¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$2.41	\$2.40	\$2.48	\$2.26	\$0.99
Sugar, daily price (raw, delivered New York, lb.).....	5.96¢	5.94¢	5.94¢	5.56¢	3.38¢
Cotton, daily price (middling, ten designated markets, lb.).....	45.14¢	#	#	31.88¢	13.94¢
Wool tops (Boston, lb.).....	\$4.50	\$4.50	\$4.40	\$2.12	\$1.41
Rubber, daily price (ribbed smoked sheets, New York, lb.).....	70.60¢	73.80¢	73.50¢	19.42¢	22.16¢

### FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	172.3	173.6	175.9	136.5	78.0
Medium grade corporate bond yield (Baa issues, Moody's).....	3.22%	3.19%	3.16%	3.24%	4.33%
High grade corporate bond yield (Aaa issues, Moody's).....	2.76%	2.71%	2.65%	2.58%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½-1½%	1½-1½%	1½-1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2%	2%	1½-2%	1½-1½%	1-1½%

### BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	50,644	50,649	50,781	46,711	††27,777
Total loans and investments, reporting member banks.....	69,342	69,501	69,225	66,283	††32,309
Commercial and agricultural loans, reporting member banks.....	18,680	18,733	18,321	13,798	††6,963
Securities loans, reporting member banks.....	2,139	2,246	2,272	1,918	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks....	30,658	30,791	31,093	36,463	††15,999
Other securities held, reporting member banks.....	6,539	6,521	6,463	5,327	††4,303
Excess reserves, all member banks.....	631	661	771	997	5,290
Total federal reserve credit outstanding.....	23,226	23,188	23,260	18,363	2,265

➔ See page 58.

\*Preliminary, week ended Mar. 10.

‡Date for "Latest Week" on each series on request.

††Estimate (BW—Jul.12'47,p16).

#Markets closed.

‡Revised.



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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
MAR. 17, 1951



**End of the fighting in Korea could come this spring.** It's no certainty, but the prospect raises questions about what would happen to mobilization. We have checked with officials on what changes peace in Korea might bring. Here, briefly, are their conclusions:

**There would be no cutback in the arms program.** The defense buildup, which will take another two years (page 22), is aimed at halting Russia in Europe. But without shooting, it will be harder to meet production schedules.

**Controls would continue.** Officials think they still will be needed to channel materials and fight inflation—unless the end of the fighting should bring a prolonged slump. This is not anticipated.

**Shortages would be less severe.** With no fighting to spur the home-front on, it would become increasingly difficult, politically, to push the arms program to the point where shortages really hurt.

•

**Labor still is calling the tune on wages for stabilizer Johnston.** You saw how Johnston caved in when labor walked out on the 10% formula. He loosened up on fringe benefits and O.K.'d the living-cost escalators. Now he's backing another concession—one that will help push wages up, with the government itself doing some of the pushing.

•

**Johnston's new scheme is this:** Let the wage control board settle disputes, too. The board would move in where bargaining fails and strikes threaten, which means making wage settlements in Washington's political atmosphere.

**This will give labor more power on wages.** For example: A union in a key plant or industry would first find out what it can get from management; then, if the union doesn't think that's enough, it can try for more from the board, simply by threatening to strike. That will bring the government in. Labor used this technique to good advantage under the War Labor Board and wants to try it again.

•

**Johnston bought the dispute-settling plan** to get labor men back on his wage board. He's telling businessmen that's good policy, even if it means government pressure in labor-management relations.

**It's inflationary, of course.** Politics usually forces government to take labor's side in a wage dispute, regardless of the consequence. Thus you can figure that federal intervention to cool a strike threat will mean a little extra in wage costs, and then in prices.

•

**The dispute-settling plan amounts to compulsory arbitration,** applied only to management. True, the control law doesn't give the economic stabilizer such powers directly. Johnston's office can enforce wage ceilings, but can't force wages up. But the draft law allows the government to seize a plant if the manufacturer fails to deliver on defense contracts. Thus, if management balks on a wage board deal and labor strikes, the government can come in and take over the plant. That's compulsion, no matter how indirect—on management.

•

**Doing business under price controls** will become more comfortable in

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
MAR. 17, 1951

the next few weeks. But the penalty is that it's going to take lots of paper work.

A thaw of the Jan. 25 freeze is about ready. DiSalle's schedule calls for specific orders by mid-April to cover practically all goods at all levels. There'll be an easing where costs are pushing on ceilings.

Wholesalers and retailers must list their prices and markups, item by item, to get out from under the freeze. That's for enforcement.

Manufacturers will have to detail costs, pre-Korea compared to now. That's so the government can determine whether they get price hikes or rollbacks.

Makers of major home appliances will have to preticket their wares—list Office of Price Stabilization retail ceilings that dealers must observe.

More steel for small business is supposed to appear after Apr. 1. That's when auto and other big civilian hard-goods makers must cut steel back 20% below their first half of 1950 rate. Very little of the "saving" will go into the making of guns and tanks. The theory of the cut is "redistribution" of the steel supply—take it away from big users, and make it available to small ones.

Import restrictions on products U. S. makers are barred from manufacturing are being urged by some of the National Production Authority's business advisory committees.

Take copper products, for example: NPA won't permit use of copper to make ash trays. But such trays can be imported. So domestic businessmen are questioning whether it's good policy to shut off production at home and then let imports move into the market. It's a little fight now. But it will get bigger if NPA extends bans on metal use.

A stiff tax jump on 1951 individual incomes is out. The rates may rise. But odds are the increase won't apply to the full year's income.

Toughest to expect, unless the foreign picture gets darker, is a rise starting on July 1 (thus hitting only half your income). But more likely you will get tapped for only one-quarter. And there's an outside chance of no rise at all until next Jan. 1.

Corporations won't get off so lightly. The increase on their incomes likely will cover the full year. But the rate may not go so high as the proposed 55% (it's 47% now).

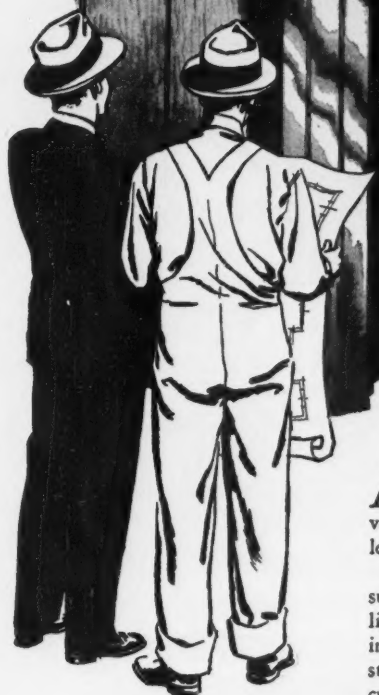
A capital gains rise is probable, although the vote will be very close. The holding period won't be changed from the present six months.

Co-ops face their toughest fight to keep special exemptions. It's the farm bloc that protests the co-ops' privileged status.

Builders, tool makers, and subcontractors looking for business should take a look at the new list of 313 projects on which fast amortization has been approved. It shows where expansions are planned in such industries as steel, cement, pulp, chemicals, textiles.

To get the complete list, write Commerce Dept. News Room, Washington 25, D. C. Ask for DPA press release 14.





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## Stainless Steel isn't new in Buildings but this year it's NEWS

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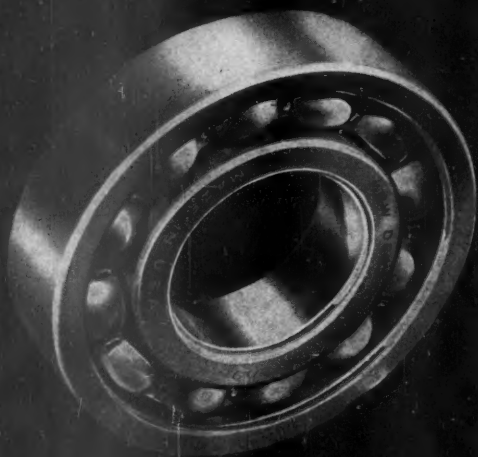
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W & D 32-16

# Reflections OF AN Engineer



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## NEW DEPARTURE BALL BEARINGS

NEW DEPARTURE • DIVISION OF GENERAL MOTORS • BRISTOL, CONNECTICUT

- The Federal Reserve Board finally is going ahead with a program for fighting inflation by tightening credit.
- FRB, with the Treasury's hard-won consent, stopped pegging the price of government bonds this week and put the market on its own. Long-term governments dropped through par.
- At the same time, it gave bankers a definition of "inflationary" loans and called on them to restrain credit voluntarily.
- Bankers see no sudden throttling of credit, but all over the country they do predict that . . .



FRB CHAIRMAN Thomas B. McCabe gets his way.

## Business Loans Will Be Harder to Get

To the businessman hunting for credit, it seemed this was the week when the host stopped urging him to have another drink.

In two long-pending moves—one indirect in its effect, the other direct—the government's money managers made it a little tougher for business to borrow.

- They called on all lenders to stop voluntarily any inflationary loans. For the first time, they told lenders what they thought an inflationary loan was.

- They abandoned pegged support of the government bond market. By allowing prices to drop and yields to rise, the Federal Reserve started a delayed reaction that will lead eventually to higher interest rates on all loans. And it made cash for lending a little harder for the banks to come by.

Neither of these steps was drastic enough to shut off the flow of credit that has been feeding inflation since the middle of last summer. But together they will make a perceptible difference in the lending policies of commercial banks and other lenders. This week a BUSINESS WEEK survey of bankers all over the country found them preparing for generally tighter credit. They still will take care of their good

customers without hesitation. But the rates that they charge will edge upwards. And they will be tougher with the marginal applications for loans.

- **Pulling the Peg**—By far the more dramatic of the government's two acts was the Federal Reserve Board's move on Thursday, Mar. 8. On that day the Fed completely abandoned its long-standing policy of pegging prices in the government bond market. For the first time in 10 years, the market was on its own. On Monday, Mar. 12, government bonds dropped through par.

What did it mean? The obvious explanation was that this, too, was part of the FRB-Treasury "full accord" on credit policy (BW—Mar.10'51,p26). The announced portion of this agreement had provided for a hike in the interest rate of some new government bonds to 2½%. By letting the price of other governments dip, the Reserve was in effect raising their yield. Thus it established a new curve for interest rates on a slightly higher level.

But the pulling of the peg was more than this. It was evidence that FRB had acquired the right to use one more anti-inflation weapon in its pact with the Treasury. By allowing the price of government bonds to slide, the Reserve was making it a little less pleasant

for lenders to cash in their governments and thus add to lendable reserves—and ultimately to spending power. A lender who might otherwise sell governments to make new loans would think twice about it if he had to take a loss on the deal.

- **Voluntary Restraint**—This was the first part of the new anti-inflation policy. The second chapter came on Monday with the announcement of the voluntary plan, the first serious attempt the U.S. had made to put teeth into something short of mandatory controls. Before, Chairman Thomas B. McCabe and the Federal Reserve Board had talked of "restraint." This time, as best they could, the monetary authorities spelled out to bankers, insurance companies, and investment brokers the kind of loans that should, and shouldn't, be made.

Loans for defense production, for agriculture, and for necessary additions to working capital are quite proper, they said. But "unless modified by the circumstances . . . so as not to be inconsistent with the principles of this program," loans to retire or buy corporate equities or for speculative investment or purchases aren't.

Local committees will be set up to advise bankers on just how this general

rule is to apply to particular loans.

• **Will It Work?**—There is no doubt but that FRB's action in the bond market has had definite effects. Prices of all bonds are off, and correspondingly, their yields are up. Ultimately, all commercial loan rates should climb, too—moving into line with the new and higher yields on governments. For it seems clear now that the Federal Reserve has no intention of reestablishing the old interest range. The Reserve has apparently come back into the market to some extent. But its aim now seems to be nothing more than to maintain an "orderly" market. You can't tell yet whether that might involve support at some level below par.

• **What the Banks Say**—But what of the voluntary curbs? The success of the plan—and to a lesser extent of the bond market operation—depends on the nation's lenders. And for their reaction BUSINESS WEEK went across the country this week to talk to the men who do most of the lending—the bankers.

Though skeptical of the voluntary lending curb, bankers generally welcomed it. This is a Cleveland banker talking: "We've made an earnest effort in the past few months to cut out any and all inflationary loans. This is a step in the right direction, but how much more it will do, I don't know."

And that, pretty much, is it. Bankers feel they have already done considerable tightening up on their own. They think it good that FRB has put a voluntary curb on the record. But they don't see—as people who have to lend to stay in business—how it will force any dramatic changes in what they consider an already prudent lending policy.

Perhaps, the crux of it all shows in what a Chicago bank executive said: "The tightening up that we've done so far is the normal thing in times like these. There'll probably be more of it—particularly if the peace talk becomes more solid, and people continue to be concerned about the inventory picture. These voluntary curbs would probably take credit for what happens. But actually, it will be no more than sensible banking policy that applies the brakes."

There's considerable question as to how much difference lower bond prices will make in lending. One St. Louis banker says he had enough short-term government notes, maturing in the next three to five years, to let him continue loaning at high rates. He feels he won't be stopped from making loans to a good customer by the mere fact that he has to take a small book loss on his government paper. A Chicago man sees it the same way: Seasonal and other factors will tend to half the increase in bank credit; lower bond prices won't make so much difference.

## Guided Missiles

Program nears production stage as Convair opens first integrated plant for supersonic anti-aircraft weapons.

The nation's guided missile program is moving swiftly into the production stage—after years of floundering around in the laboratory.

• **Integrated Plant**—Brightest sign of progress is the opening of the first integrated plant for producing supersonic guided missiles. Consolidated Vultee Aircraft Corp. is operating the plant, under contract from the Navy.

• **Antiaircraft**—First product at the new plant will be a supersonic anti-aircraft missile. Output is expected to start within a few months; hiring of the 1,500 workers for the 200,000-sq. ft. plant started on Mar. 1.

Production priority goes to ground-to-air missiles, because of the short "sight" of radar. Ground radar can see only about 150 miles; that doesn't give an interceptor plane much time to reach bomber approaching at 600 mph.

Complete integration of the plant is in sharp contrast with the earlier missile program. For a long time, research and development were widely scattered among aircraft companies, universities, and military testing bases. Actual production was also by bits and pieces, with one company making the fuselage, another the guidance system, a third the rocket motor.

• **Expenditures**—In the days before K. T. Keller, president of Chrysler Corp., took over the Office of Guided Missiles, annual expenditures of the sprawling program ran about \$100-million a year. This figure is expected to shoot up to \$2-billion by 1952, and \$3-billion by 1954.

Besides the Convair plant, there are other signs of stepped-up activity in missile production:

• **North American Aviation, Inc.**, of Los Angeles has created an Electro-Mechanical Division to design, develop, and manufacture guidance control systems.

• **Aerojet Engineering Co.**, of Azusa, Calif., is building a \$6-million plant near Sacramento to make rocket engines and solid fuels.

• **Hughes Aircraft Co.** is setting up a plant at Tucson, Ariz.



## The Bathing Suit Is What Counts

A nice singing voice and a graceful way with an evening gown are all very well—but it takes something else to sell bathing suits. That's the conclusion President E. W. Stewart of Catalina Swim Suits has come to. For 12 years Catalina has been a sponsor of the Miss America contest, and for 10 of those years Stewart has been getting more and more discontented over the increasing emphasis on poise and talent in picking winners. Not since Rosemary LaPlanche (left) won the title in 1941 have

the judges paid the attention Stewart would like to attributes that fill a bathing suit. This year refinement went so far that officials refused to allow 1950 winner Yolande Betbeze (right) to pose in a bathing suit for a magazine cover—and Catalina quit. Stewart plans to start a rival contest with its emphasis strictly on the body. Starting in 1952, Miss Universe will be selected in Hollywood under sponsorship of Catalina, Pan American World Airways, and a still unnamed picture studio.



# Looking Out for Civilians

**As military demands squeeze consumer goods, NPA will try to keep up minimum production of essential lines.**

Unless there is a major war, it looks as if the civilian is going to have his cake. To be sure, it won't have quite as much frosting as now. But there'll still be a cake.

So far, there's been no serious shortage of civilian items. That's largely because civilian supply pipelines from manufacturer to wholesaler to retailer were packed full last year. Heavy inventories accumulated, and so far these inventories have kept consumers from feeling any cuts at the manufacturing end.

But sooner or later, the inventories will run off. When that time comes, consumers will have to get along with what the military leaves them out of current production. What we will have then will be a long way from a bare-bones economy. But there will be enough of a squeeze to hurt here and there—especially if available materials aren't channeled into the most essential civilian items.

• **Man-Size Job**—The job of keeping controls from shrinking the flow through the pipeline more than actually required by defense demands has been handed over to Lewis Allen Weiss, new director of the National Production Authority's Office of Civilian Requirements. A former board chairman of Mutual Broadcasting System and executive of several West Coast radio networks, the OCR boss has his work already cut out for him.

• **Weiss' Big Problem**—He knows that civilian production must be the low man on the mobilization totem pole—rating below military requirements, which get the first whack at everything, and industries that support the defense programs. Already he's heard the protests of civilian goods manufacturers, pinched by limitations on use of materials. And he knows the pinch will be much worse next year when military and supporting production really start rolling.

• **First Line of Attack**—Weiss has two lines for attacking this problem. Both methods are strictly limited in their effectiveness.

First, as the claimant for most types of civilian goods, he will battle with the armed services and other priority claimants for a share of materials when the mobilizers split up the available supply. The battle won't become serious until the military and other priority



OCR's new director, Lewis Allen Weiss, has the job of keeping consumers at least halfway happy.

programs start taking a much bigger cut of materials than they are now. But Weiss already has had a taste of it.

For example, when the controllers started writing the nickel conservation order (M-14), they proposed to cut the amount of nickel in plating alloy for flatware from 17% to 10%. The flatware industry (cutlery, utensils, etc.) proved to Weiss that 17% was a minimum alloying content, developed over a period of 300 years. Weiss persuaded the controllers to allow that much for plating and find other places to save nickel.

Though he's won several such victories, Weiss' toughest battles won't really start until after the Controlled Materials Plan gets under way. That's when the military and supporting programs will come in for quarterly allocations of materials, nailed down to definite production schedules. Then Weiss will have to determine which civilian industries must get critical materials and how much, which will get none at all. There's little chance he can get the military to cut back their demands—no one did during World War II.

• **Second Line**—His other approach to meeting civilian production problems is that of a super troubleshooter. He likes to think of himself and OCR as a sort of doctor of controls ailments. A doctor, he emphasizes, who will prescribe for industry only when requested to do so.

In this capacity, he's helping civilian goods producers plan for the tougher times ahead. For example, he won't

tell a manufacturer to look for a substitute for the chrome he uses in his product; but he'll point out that chrome is scarce and will be even scarcer, and let the smart businessman draw his own conclusions. And, because he knows what is available in materials, he and his staff can, and will, advise on substitute materials.

With the same low-pressure salesmanship, OCR will advise any businessman who asks to standardize—cut down the number of models he produces, especially luxury types that use up the most critical materials.

• **Ersatz**—Substitution and conservation play an important part in Weiss' plans for maintaining supplies. Washington won't cut back unit production of items as it did in World War II. Use of metals and other scarce materials has been restricted, and the restrictions will get tougher. But Weiss—with the support of mobilization policymakers Charles E. Wilson and William H. Harrison—is in favor of giving businessmen a free hand in figuring out ways to keep their production up. Weiss is counting on the ingenuity of manufacturers to solve a lot of his problems for him.

• **Price Lines**—But Weiss also has been handed a large part of the responsibility for maintaining production of low-price, high-quality civilian items. By orders of President Truman, OCR and Di-Salle's Office of Price Stabilization will share this task. And this is a place where betting on business ingenuity won't solve anything.

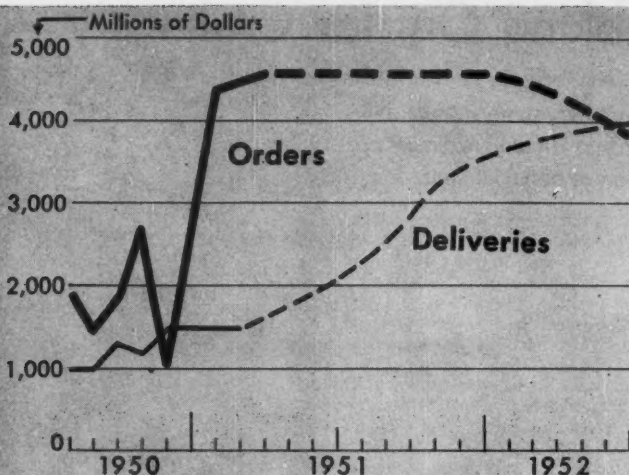
World War II proved that materials shortages and price controls give producers of civilian goods a double-barreled incentive to drop their low-end lines. Materials shortages limit production, and price controls cut profit margins. Both OCR and OPS are planning steps to meet this threat, though neither agency feels the need to take immediate action.

The first move probably is up to OPS, since it is closer to the price-quality situation than OCR. The price stabilizers say they are trying to set ceilings high enough initially so as not to discourage volume production of low-end goods. The stabilizers are also thinking in terms of stimulating such production—if and when it becomes desirable—by using margin-type controls. These controls would allow more generous profit margin on low-end items than on costlier lines.

If these stimulants fail, OPS will call on OCR for aid. Then OCR probably would step in, as the War Production Board did in World War II, to force more production of low-end textiles. WPB allocated raw materials to the textile makers and ordered them to use them to produce their historical percentage of low-end items.

# War Equipment

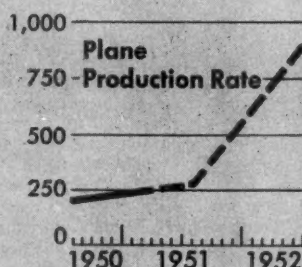
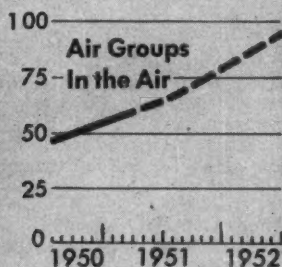
OBJECT: A fast buildup of military strength until mid-1952, then a maintenance operation to keep the armed forces in shape to expand quickly — at any time — to full war scale.



# Munitions






# Planes



# Ships



		June '50	Now	June '52
	<b>Total Men In Uniform</b>	1,384,000	2,650,000	3,500,000
	<b>Ground Divisions Ready to Fight</b>	10	18	22-25
	<b>Steel Output</b>	100.5-Million Tons	104.5-Million Tons	112-Million Tons
	<b>Aluminum Output</b>	724,000 Tons	801,000 Tons	1,250,000 Tons

## Already—U.S. Is a Military Nation Again

Since Korea, the U.S. has pounded as never before in peacetime on three themes: arms, men, and industry. The stress has been unsteady; it rose and fell inversely with our battle fortunes in Korea. But now, 265 hectic days since June 25, we can begin to see where we are going and what we are getting out of \$41.8-billion voted for defense, \$8-billion a year in new taxes, and a fast-growing system of controls over business.

The charts above pretty much tell the story: The fast buildup to semi-garrison strength is gaining momentum. And after rearmament reaches a peak by mid-1952, national defense will be put on a maintenance plateau that will cost roughly \$50-billion a year for years to come.

This was hard to see before. Only now has the brass in the Pentagon got its long-range sights set. The change shows in the care with which they are planning the 1952 fiscal year military appropriation. Offhand, this care might look like dalliance. But Defense Secretary Marshall and his staff make a sound case that money and programs must be paced so that the peak buying of munitions late in next year won't be followed

by a sickening decline once the fast-buildup goal is reached.

• **The Score**—The guns are being made; expenditures—and that means deliveries—for military hard goods have gone up one-third since Korea started.

The planes are being produced—monthly production has increased 16%.

Men are being put in battle shape—we have 18 combat-ready divisions now, compared with 10 last June.

This progress started from dead center. Last June the Pentagon was operating under the Louis Johnson economy drive. The Air Force had dropped from 56 groups in July, 1948, to 48 groups in July, 1950. No men were being drafted. Ships at sea and planes in the air were at barebones strength.

• **Manpower**—Most of the services were top-heavy with rank. In fact, the smallest group of officers, exclusive of the very top grade of brass, was second lieutenants and ensigns. And the services were well below authorized strength.

On June 30, 1950, the combined numerical strength of the armed forces was 1,458,000 men. As of Mar. 1, 1951, the total number of men and women in uniform is in the neighbor-

hood of 2,650,000. Here are how the estimates break down:

	June 30, 1950	Mar. 1, 1951
Army .....	592,000	1,400,000
Navy & Marines....	380,000	600,000
Air Force .....	412,000	650,000

The Pentagon says that over 250,000 men are now in Korea. Probably another 150,000 are on occupation duty in Europe and Japan. Probably 1.8-million or more are in the U.S. at present; other forces are scattered all over the world.

The Army now has somewhere near 1.4-million men on active duty. Besides the 18 divisions ready, there are numerous nondivisional "shooting-at-enemy" units—tank battalions, engineer battalions, artillery units, antiaircraft units, regimental combat teams, etc. By late this summer, the Army will have the equivalent of 24 divisions on active duty. By mid-1952, there will be 22-to-25 battle-worthy divisions.

What the buildup amounts to is this: (1) At least MacArthur can get reinforcements at a rate faster than the rate of losses through attrition or even another Chinese offensive; and (2) the four divisions for Western Europe that Eisenhower is supposed to get from



the U. S. will be ready to ship out when the time comes.

• **Planes**—At the beginning of Korea, the Air Force had an authorized strength of 48 air groups. Since then, 10 Air National Guard groups and four reserve wings have been called to active duty. Plans call for bringing in 12 more Guard groups and 21 more reserve wings by May. By mid-1952, Gen. Vandenberg will have about 100 groups.

Production since Korea has been mostly in combat planes—jets, including the new Sabre F-86, as well as B-36 intercontinental bombers, the strategic arm that can deliver atom attacks if war comes. Output has gone up from roughly 215 planes a month to around 250 at the first of the year.

Aircraft capacity is being built up to a potential production of 4,000 a month, in case of war. At the height of World War II, actual output—including trainers—was 9,000 each month.

• **Procurement**—The heaviest ordering during the first seven months of fiscal 1951 was in hard goods. Total commitments reached \$16.4-billion during the period. Hard goods ran to \$14.1-billion; clothing, subsistence, and petroleum products hit \$1.5-billion; military construction and expansion of facilities were around \$800-million.

The present rate of ordering goods is faster than January plans expected it would be. According to schedule at that time, contract letting for March should have been around \$3.5-billion. Latest estimates put the rate at nearly \$1-billion more per month, somewhere between \$4-billion and \$4.5-billion.

Expenditures—which amount to deliveries—should hit a \$2-billion-a-month rate by July, 1951. Hard goods expenditures already are around \$800-million a month. This does not include shot and shell—MacArthur has been getting ammunition stored up since World War II. It doesn't include tanks, either; except for some production of light tanks, procurement of new tanks is still in the mockup stage. Peak tank production will come in late '52.

• **Ships**—The Navy has put over 100 ships back on the line, bringing its combat vessels back near wartime strength. Congress is in the process of approving a supercarrier, plus a host of auxiliary craft.

• **Industrial Capacity**—Industry already has added 4-million more tons of steel capacity since June 30, 1950, and 77,000 tons of aluminum. Government-aided expansion programs have been started on probably 10-million additional tons of steel, nearly 500,000 tons of aluminum, though all this new capacity won't be ready by 1952.

New capacity is being sponsored by the government for rubber, steel castings, metal extrusions, electronic gear, machine tools, and the like.

## Estimates Dash Hopes for Steel Mill

But C&C's revised report will contain data supplied by New England Council. It may be more in line with council's estimates.

New England's rosy dream of a major integrated steel mill just about blew up in its face last week. Bethlehem Steel Corp. dropped the option to build and operate the mill, which it had held since last November.

Bethlehem's reason: an unfavorable report on the mill's economic possibilities from the New York engineering firm of Coverdale & Colpitts.

But Walter Wheeler, president of the New England Council, which has been the dynamic force behind the mill from the start, refuses to take the dim view. He still thinks the chances are 50-50 that the mill will be built. That's a big drop from his January estimate, when the government awarded the mill a \$250-million certificate of necessity (BW—Jan. 13 '51, p. 23). But still, in view of the week's developments, 50-50 seems pretty optimistic.

• **New Report in the Works**—Wheeler thinks that that much optimism is justified. His reason: Coverdale & Colpitts voluntarily withdrew its report 24 hours after issuing it, to consider certain additional data—supplied by NEC. The revised report is due in two to three weeks, and Wheeler believes it will show a much more favorable picture. On the basis of the revised report, he feels that the odds are even that either Bethlehem or some other steel company will decide to go ahead on the mill. (Since Bethlehem dropped the option, the New England Steel Development Corp. is free to negotiate, and is negotiating, with other firms.)

• **What Happened**—The C&C report shocked the pants off the council and the development corporation. What happened, basically, was this: After its carefully planned and beautifully conducted campaign had brought the dream of a New England steel mill almost to reality, the council lost control of the situation at the crucial moment.

The council's economists had worked closely with C&C engineers in the early stages of the study. Once Bethlehem stepped into the picture, late in November, they withdrew, although they remained on call. They expected that, in the normal course of events, they'd get to see the report before it was issued and to suggest changes. They probably would have, too—except that the course of events wasn't normal.

The Connecticut state government appropriated the money for the C&C study more than a year ago. The legislature is currently debating a measure that would give the state the right of eminent domain to acquire the land

needed for the mill. The certificate of necessity is due to run out May 11 (though there probably won't be any trouble about extending it). For reasons such as these, there was tremendous pressure to get the report out fast.

The result was that Wheeler and his colleagues didn't see the report until 24 hours before it was officially submitted to Gov. John Davis Lodge—and until after Bethlehem had made up its mind (Bethlehem's own engineers had been working closely with C&C, so they knew the content of the report in advance).

Wheeler and his associates were dismayed to find that the report's estimates of the costs of ore, coal, and limestone were much higher than their own studies had indicated they would be. C&C agreed to pull back the report to go further into the cost question.

• **Which Estimate?**—Chances are that the revised report will present two sets of cost estimates—one based on its original figures, the other on the council's. There's even a slim chance that the report will be all the council had expected in the first place. But the damage may already have been done.

## Income Tax Returns Face Electronic Sleuth

If your income tax return bites back at you this year, blame it on the science of electronics. The Bureau of Internal Revenue is using a battery of electronic calculators to check on your arithmetic.

BIR already has 20 of the super-human gadgets ready to stare at your figures with a cold, electric eye; seven more are on order. Between them, they're expected to give an infallible once-over to 8-million returns this year.

For the present, the machines will check only your arithmetic. That was tried experimentally last year and proved a huge success.

BIR has even fancier future plans for the machines. First, they're going to figure out what the typical deduction ought to be for any given income bracket. That's another job that human calculators haven't got time for.

After that, BIR hopes, the machines can be set to do real sleuthing and blow the whistle if you overstep the norm. Each time a machine spotted an outsize deduction, it would toss the card aside. Then the human gimlet-eyes will really get to work on the maverick returns.





SECRETARY OF AGRICULTURE BRANNAN tries to explain to Southern congressmen why he helped OPS draft the cotton order in which . . .

## DiSalle Braves the Farmers

Farm bloc paws the air as OPS clamps a ceiling on cotton. If he can make it stick, DiSalle will have taken a long step toward control of farm prices, especially meat, the key item in the cost of living.

Price Stabilizer Mike DiSalle took the first step toward putting farm prices under ceilings last week. Right off, he ran into a hornet's nest.

The commodity DiSalle had the nerve to try to control was cotton. (He set a ceiling of 45.76¢ per lb. on 1½ in. white and extra white middling—a good representative grade.)

The stinging came from farm bloc congressmen who demanded that he cancel the order.

• **Test Case**—Cotton is a test case. From it, the Office of Price Stabilization hopes to learn whether it can ever succeed in holding the line on the key food—meat.

If DiSalle stands firm—and still hangs on to the job—there's a chance that the rise in food prices at the consumer level can be slowed, maybe halted. But if he yields even a little, the drive to control prices may collapse before it has been well begun.

Cotton has an importance of its own, too. Right now it is a real factor in the Consumers Price Index, accounting for 17% of the average worker's clothing allowance, 3% of his total budget. When durable goods become scarce, these percentages will rise. So a lid on cotton now may mean less price—and wage—pressure later.

DiSalle, of course, gave more reasons than this for imposing the ceiling.

From the outbreak of Korea to January, the average price of raw cotton rose from 29.91¢ per lb. to 41.31¢. Since then, it has reached the ceiling level. DiSalle's staff feared that further substantial jumps might take place before the size of the coming crop could be fixed.

• **Parity, Or**—In writing the Defense Production Act, farm state congressmen put a floor under the control OPS could impose; it was the parity price or that prevailing in the month before Korea—

whichever was higher. For cotton, this "minimum legal price" was around 31¢.

The ceiling DiSalle imposed was far above this level. Nevertheless, when the order came out, cotton congressmen were hopping mad. They put DiSalle on the stand for two hours and laid down the cotton man's point of view:

- The problem of fixing prices is insuperable because there are more than 500 different grades.

- Ceilings will act to take the incentive out of expanding acreage, at a time when demand for cotton is rising.

- Ceilings were never imposed on raw cotton during World War II. Rep. Gathings of Arkansas wound up the cotton bloc's case with this question: "Will you or will you not repeal the order?" Behind the question was a threat to legislate an outright ban on raw cotton controls.

- **Not Insuperable**—DiSalle stood his ground, told the lawmakers that he was administering the defense act the way Congress had written it. The problems of controlling cotton definitely weren't insuperable.

Grading, for one, had been solved by the Dept. of Agriculture in working out price supports. As for rushing in where the old Office of Price Administration had feared to tread, DiSalle said that the supply and price situations were vastly different.

The U.S. entered World War II with an enormous cotton carryover, and huge crops kept the surplus large. Prices never reached parity.

Now cotton is in short supply. Acreage restrictions last year kept plantings low. The supply for domestic consumption was only 14-million bales.

That was hardly enough to meet current mill demand running at a rate of 12-million bales a year, much less to permit adequate set-asides for reserve. Only a loose limitation on exports kept prices from going through the roof. Mexican cotton, for example, has been bringing 80¢ a lb. on the world market.

- **Key Spots**—When DiSalle put such bonanza prices out of reach of the cotton people, he was inviting trouble. Southern congressmen hold key spots in Congress. Indeed, the Southerners were able to balk Agriculture Secretary Brannan's attempt to hold cotton prices down by a tight export quota.

But DiSalle is a master politician. He acted at just the right time. About 85% of the 1950 crop has passed out of the hands of farmers. So the profits they are losing apply to fairly small volume. It will be some months before the new crop makes the farmer really resent the ceilings.

If the cotton hurdle is passed, OPS can turn to meat. Problems of grading and incentive are roughly the same. And the growers are not quite so numerous, vocal, or politically powerful.

## Who Is Getting Fast Amortization for New Plant

Industry	Number of plants	Dollar value of plants (millions)	Percentage of cost given 5-yr. amortization
Iron and steel	118	\$1,900	60-85%
Railroads	34	244	65-80
Water transportation	26	88	80-90
Aircraft	81	126	75-90
Refractories	39	43	85
Magnesium	9	43	85
Autos and tanks	20	65	75-85
Electronics	17	25	75
Fibrous glass	4	9	75
Munitions	16	30	up to 100
Aluminum	4	400	80
Cement	5	31	70
Paper and lumber	19	196	50-65
Fuels	25	98	75-100
All others	76	116	50-100
Total	493	\$3,045.7	74% (average)

## Amortization for Everybody

Or almost everybody. Policy of encouraging industrial expansion generally—not just munitions—is now official. But few will get quick amortization on full plant cost.

For weeks, businessmen with plant expansion projects in the works have been on tenterhooks. Nearly all of them are desperately anxious, in this high-tax period, to take a large proportion of the cost of the new facilities out of current earnings over the next few years—and do it before they figure their taxes.

But an underground policy battle in Washington has hung up decisions on hundreds of applications for this fast amortization privilege. The battle is between two sharply opposed conceptions of what government policy ought to be on industrial expansion. The two views:

- Expansion should be limited to strictly military projects and new plants that are essential to completing military jobs. This is the dominant view in the Pentagon and among mobilizer Charles Wilson's immediate advisers.

- The whole industrial capacity of the country should be expanded across the board. National Security Resources Board chief Symington, the President's Council of Economic Advisers, and most of the politicians seem to be on this side.

- **Indicator**—This week both camps are still claiming White House support. But there is one important indication that the second view is winning. Defense Production Administrator Harrison, who now has authority over expansion, adopted in toto Symington's policy on fast amortization, the aid-to-expansion tool the Administration has used most. In a memorandum to all

production agencies under him, Harrison declared:

"Military strength and economic strength are closely linked. They in turn are affected by the adequacy of goods and services essential to strong civilian support of a mobilization effort that may endure for a long period. We have considered that a broadening of the industrial base of the economy was well within the concept of national defense, and that basic industry as well as facilities to be employed in supplying direct and indirect military requirements could properly be certified. . . ."

- **Rumors End**—Harrison's memo, the first detailed policy statement issued by amortization officials, also pegged down publicly a lot of things that had been rumored and talked about since last fall, when the amortization program got under way.

For instance, Harrison said:

- Five-year amortization of less than the full cost of a facility is here to stay.

- Percentage of the cost given the five-year amortization option ranges from 50% to 100%, depending upon the type of plant or equipment that is involved.

- Fast amortization is being given to a wide range of industries and plants—from rayon to glassware to cement and machine tools.

- Only a dozen or so companies have gotten 100% amortization on their expansion.

- **Prospect**—What does all this add up to for the businessman with a plant

expansion in the works? In the first place, it means that unless he's in a pure luxury industry he has at least a reasonable chance of getting permission to amortize his new facility fast when he figures his tax return.

In general, though, he won't be able to amortize the entire cost of his project in less than the normal time. Right at the start, the cost of land and a few other things will be thrown out. Of what remains, he'll be allowed to take fast amortization—if his application is approved—on a percentage of the cost ranging from 50% to 100%.

There's no firm rule to tell what the percentage will be. Roughly, the government will grant a high percentage on the cost of plants it is eager to see built and which won't be built without it. Low percentages go to plants the government approves of but isn't really wheed'ed up over. On different types of facilities, the dickering starts at about these figures:

### 100%

Special-purpose machine tools for production of military products exclusively  
Finishing units for production of alkylates and aromatics from petroleum

### 90%

General-purpose machine tools  
Supersonic wind tunnel  
Lake ore carrier (converted steamship)

### 85%

Blast furnaces  
Iron-ore handling & processing facilities  
Coke ovens  
Special bldg. for tank manufacture  
Conventional bldg. for manufacture of guided missiles in regions of doubtful post-emergency utility

Petroleum storage in certain areas  
Magnesium rolling mills  
Refractories  
Ferro-alloy smelting facilities

### 80%

Alumina & aluminum reduction plant  
Bauxite  
Blood plasma processing plant  
Freight cars  
Inland waterway barges for petroleum and raw materials for steelmaking  
Lake ore carrier (conventional)

### 75%

Basic petroleum refining  
Steelmaking furnaces  
Bloomery mills & soaking pits  
Scrap preparation & handling facilities  
Superphosphate plants in which the Atomic Energy Commission is interested  
Conventional factory buildings & extensions in industrial locations

### 70%

Finishing facilities for high-alloy steels  
Diesel-powered tugs & tow boats  
Cement plants in certain areas

### 65%

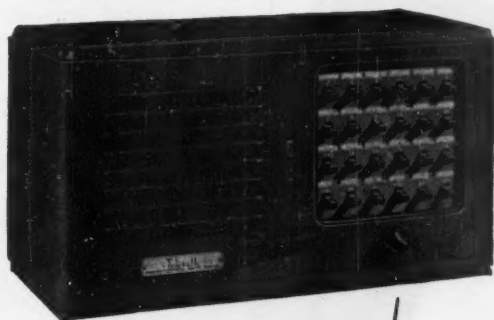
Diesel-electric locomotives  
Wood pulp facilities of certain types  
Cotton gins in certain locations

### 60%

Steel finishing facilities

### 50%

High-tenacity rayon plants  
Paper mills of certain types



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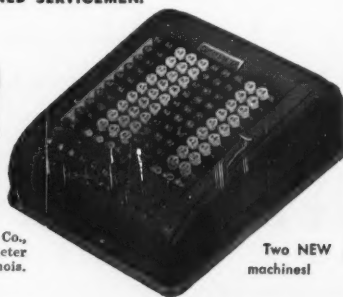
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## BUSINESS BRIEFS

**Restaurants got a break** when OPS took them from under the Jan. 25 freeze, slapped on a new percentage-margin regulation. The formula is this: If total revenue from meals in the base period was X times food cost, then meal prices now must be set to keep revenue X times food cost. Thus if food costs continue to rise, profits will grow, too.

**Manufacturers' soap prices** were rolled back to December levels along with tallow and grease, prime soap ingredients. For Procter & Gamble, it meant a dip of 6% at wholesale on its household products.

**More mothball ships**—41 Liberties—were ordered back to service to carry commodities to Europe and India under ECA programs. Use of the slow-moving Liberties means the U.S. has run through most of the top layer of the reserve fleet, the late-war Victory ships.

**A 50% expansion** was announced by Cleveland Graphite Bronze Co. Plans call for five new branch plants. Cash to build them—between \$15-million and \$25-million—is slated to come from insurance companies.

**Ford will spend \$17-million** to rehabilitate the Chicago Tucker plant, will put out another \$82-million for machine tools. Its contracts for aircraft engines to be built there come to \$565-million.

**Advertising council's new head** is Fairfax M. Cone, chairman of the board of the Foote, Cone & Belding ad agency. He replaces General Mills' S. C. Gale.

**Rail freight rates** can be boosted—4% in the East, 2% in South and West—in 15 days, under new ICC order. Carriers had asked for a 6% jump.

**Hotel business** is doing fine. Sales for January were up 8% over the previous year in all departments except beverages, which went up 7%. Occupancy fell off one point, to 79%.

**Retail rug prices** have been set by OPS, using its "blank check" (BW—Mar. 10 '51, p. 98). Rug makers get a 15% price boost. But retailers are permitted to pass along only the actual dollar-and-cents cost to them. They get no markup on the boost.

**Housing starts** continued to drop. BLS figures show 80,000 starts in February, compared with 87,000 in January. But February still almost matched the 82,900 figure of a year ago.



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TENNESSEE GAS TRANSMISSION COMPANY  
TEXAS ILLINOIS NATURAL GAS PIPELINE COMPANY  
TIDE WATER ASSOCIATED OIL COMPANY  
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## Webster Heats Toll Booths of Pennsylvania Turnpike

In 1950, the Pennsylvania Turnpike Commission extended the "World's Greatest Highway" 100 miles easterly to the outskirts of Philadelphia.

Taller & Cooper factory prefabricated Toll Booths for the eight new interchange points incorporate Webster Heating Equipment. Each one has a Webster-Nesbitt Series R Unit Heater with Webster Supply Valve, Webster Traps for unit and riser drip and a Webster Series "78" Strainer.



Entrance to Pennsylvania Turnpike at King of Prussia, Pa., showing Taller & Cooper Toll Booths.

In each Toll Booth, the Webster-Nesbitt Series R Unit Heater is mounted overhead. A flow of regulated heat is delivered through a grille at the floorline. Ample heat is provided to compensate for "open window" conditions.

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## DEFENSE BUSINESS

### 10% Profit Before Taxes

That, or less, is what the new renegotiation law will leave you on government contracts. Independent board of five, including at least three civilians, will be set up as top authority.

Your net profits, before taxes, on any government contracts or subcontracts are likely to be 10% or less.

A new contract renegotiation law is coming up, and you aren't likely to get any better break under it than under the easier World War II law. Renegotiators then went over about \$190-billion worth of contracts. They recovered more than \$40-billion, taking back profits if, on the average, they ran more than 10% or 11%. Actually, net recovery to the government was \$3-billion, since excess profits taxes would have recovered about \$7-billion of the \$10-billion anyway.

The Renegotiation Act of 1951 has many new angles. It's fully as broad as the World War II statute, replacing a 1948 statute that applied mainly to makers of airplanes.

• **Board Set Up**—Probably the biggest change is the establishment of an independent renegotiation board of five members, at least three of whom must be civilians. This new top authority is Congress' answer to the feeling that military renegotiation boards have been too closely associated with the procurement officials who placed the contracts in the first place.

The Renegotiation Act of 1951 provides for recovery of excess profits on contracts not only of the Defense Dept., but of other government agencies. And it covers a wide range of materials, not just munitions.

It brings you under renegotiation if you do as much as \$250,000 worth of government business a year.

• **Raw Minerals**—There is a long list of contracts that are automatically and specifically excluded: those covering farm products, for example, or petroleum and other minerals in their raw state. In this respect, the new law follows closely that in force during World War II.

Actually, the law wasn't yet in effect at midweek. But Truman had received for his signature the compromise bill worked out by a joint House-Senate conference, and then approved by both houses on Monday.

Object of the law, of course, is to get the best bargain possible for the government at a time when procurement officials are shoveling out billions of

dollars worth of contracts every month.

• **Negotiation**—Since the declaration of a national emergency, procurement officials have had an almost free hand in negotiating contracts with anyone they choose on terms as liberal as they figure is needed to get the stuff rolling.

However, in many cases, neither the buyer nor the seller, has the foggiest idea of what costs or price should be. The government wants quick delivery and doesn't want production delayed while suppliers take months to figure out costs. Companies are tooling up on items far different from their civilian lines—different, too, from what they made during World War II. The quantities, specifications, and delivery dates are likely to be switched several times during the course of the contract.

• **No Firm Figure**—All of which makes it well-nigh impossible to arrive ahead of time at an accurate appraisal of the price-per-unit of the thing.

In these circumstances, Congress is counting on the new renegotiation law to recover any excess profits that some companies might make—inadvertently or otherwise—as a result of this liberal policy during the original negotiation.

The new law is pretty baffling for the uninitiated. But here are the high-spots in simplified form:

• **What is covered:** Contracts made by departments of Defense, Army, Navy, Air Force, Commerce, General Services Administration, Atomic Energy Commission, Housing & Home Finance Agency, Reconstruction Finance Corp., the Panama Canal, and other agencies the President may designate.

• **What is exempt:** Contracts with any contractor whose receipts are less than \$250,000 in any one year. Contracts for agricultural commodities, timber, petroleum and other minerals in their raw state. Contracts with regulated common carriers and public utilities, with nonprofit institutions, such as universities, and with states, territories, possessions, or foreign governments.

• **"Permissive exemptions":** The board has the power to exempt contracts by classes, and individual contracts within classes, if it finds the contracts in themselves guarantee there will be no excess profits.

The board must exempt any contract



## More alertness...less danger from CANCER

Although cancer ranks second among the causes of death in our country, headway is being made against it. In fact, medical science is making such progress against this disease that there are now *four chances out of five* for curing some types of cancer—provided diagnosis is made early and proper treatment is carried out promptly.

One of the reasons why there is increasing hope of bringing cancer under control is that more and more people are facing the facts about this disease. They are learning its possible early "warning signs" and are seeing their doctor as soon as they notice any of them.

These "warning signs" do not necessarily mean cancer. In fact, in the great majority of cases, they are due to other causes. They do, however, indicate that something is wrong—and that an immediate medical examination is advisable.

If the doctor finds cancer or condi-

tions leading to it, he will recommend prompt treatment—usually complete removal by surgery, destruction by X-ray or radium, or by a combination of the two.

### These Are Cancer's "Warning Signs"

1. Any lump or thickening, especially in the breast, lip, or tongue.
2. Any irregular or unexplained bleeding.
3. Any sore that does not heal, particularly about the mouth, tongue, or lips.
4. Progressive change in the color or size of a mole, wart, or birthmark.
5. Loss of appetite or continued indigestion.
6. Any persistent hoarseness, sore throat or difficulty in swallowing.
7. Any persistent change in normal elimination.

Pain is not usually  
an early symptom of cancer.

Surgical techniques are constantly being improved so that operations for cancer may be performed with a minimum of risk. Machines that emit X-rays of greater penetrating power are making this form of treatment more effective.

Medical science is continuing its search for other ways to attack cancer. For example, hormone therapy is of benefit in some types of cancer, even when the disease is advanced. In addition, the search is on to discover chemical compounds which will destroy cancer cells without harming normal cells. Studies are also continuing on tests to detect cancer early.

While the outlook for the conquest of cancer becomes more hopeful each year, alertness on the part of each individual is still necessary to curb it. That is why doctors urge prompt medical care at the first sign of trouble—for cancer can be cured in most cases if detected and treated early.

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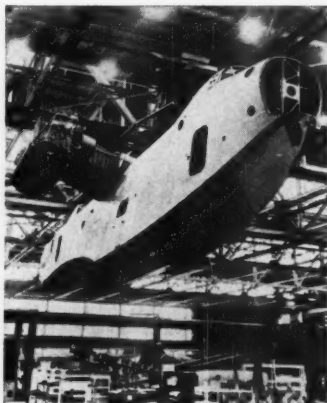
Made in U.S.A. by MINNESOTA MINING & MFG. CO., St. Paul 6, Minn., also makers of "Scotch" Brand Pressure-sensitive Tapes, "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "3M" Adhesives.

that it decides "does not have a direct and immediate connection with national defense." This clause is limited somewhat: "The board is not to determine that a contract does not have a direct and immediate connection with the national defense if the purpose of the contract is essential to the national defense, or is clearly connected with the national defense, irrespective of the fact that there may appear to be intervening mediums between the purposes of the contract and the ultimate national defense."

Just what this all means, the board will have to decide. For instance, would you, under this language, renegotiate profits made by U.S. Steel's projected new steel plant? The company was granted a certificate of necessity permitting fast amortization of the cost on the basis of the defense needs for such facilities.

**Carry-Forward of losses:** Losses sustained on renegotiable business may be carried forward as an item of cost in the following year, providing such losses aren't due to the gross inefficiency of the contractor.

There are scores of more technical provisions; the conferees' explanation of the amendments alone covers 13 tightly printed pages. There are provisions on what is chargeable as a cost, on appeals to the Tax Court, on the powers that the Renegotiation Board may and may not delegate, on other procedural matters.



## Death for a Submarine

Give it wings and some other equipment, and this antisubmarine seaplane will be ready to take off. The hull of a P5M-1 Marlin hangs from a skyhook overhead crane in the Glenn L. Martin factory. A few more hops down the line and the plane will take off from the Chesapeake Bay. Martin, which produces the long-range patrol plane for the U.S. Navy, is working on its fourth production order.

## Material Savers

**NPA names industrial task forces to recommend ways to conserve scarce items in production. Orders will follow soon.**

How do you get the most out of a given amount of raw materials? Can you standardize the product to eliminate "luxury specifications"? How about substituting relatively plentiful materials for scarce ones? Might a simplified design save material?

• **Task Forces**—These are the kind of problems that the National Production Authority is turning over to special task forces of its business advisory committees to solve. NPA will soon issue a series of conservation orders based on their solutions. The orders will detail ways to save steel, aluminum, copper, and other scarce materials, and they will carry the weight of law.

Here's an example of how the task forces get their assignments: The NPA advisory committee for the electric motor and industrial controls manufacturers reported it was having trouble getting copper and aluminum. NPA named separate committees—one for electric motors, one for controls—and told them to come back with recommendations on ways to save metals.

• **Refrigerators, Batteries**—A similar task force for the commercial and industrial refrigeration and air-conditioning industries has made a partial report, which is now being elaborated.

The electrical conduit advisory committee has told NPA that important amounts of zinc could be saved by halving requirements for conduit coatings. They recommended a change from a four-dip requirement in "Preece Tests" to two dips for indoor conduits, with the addition of two coats of weather-proof paint for outdoor use.

The dry cell battery manufacturers' advisory committee supplied the personnel for a five-man task force on conservation for that industry.

Members of the domestic communications operating advisory committee told NPA it was already conserving materials by (1) reducing the sizes of wire, cable, and cable coatings, (2) substituting synthetic rubber for natural rubber, and (3) using lead for zinc in some galvanized coatings on hardware.

• **Recommendations Only**—Conservation studies are being made in a broad line of products outside the electric equipment industry. They must be conducted in strict accordance with NPA rules in order to avoid possible infringement of antitrust laws. The task force can make recommendations only; NPA itself must issue the orders.



# Extra Value for Esso



This MEK Dewaxing Unit, recently completed at Bayonne, N. J., for Esso Standard Oil Company, is the largest and newest of three such units which Badger has recently designed and constructed for Esso and an affiliated company. Improvements and modifications in each successive unit have provided extra values for Esso, in lower initial cost, earlier completion, more economic operation and easier maintenance.

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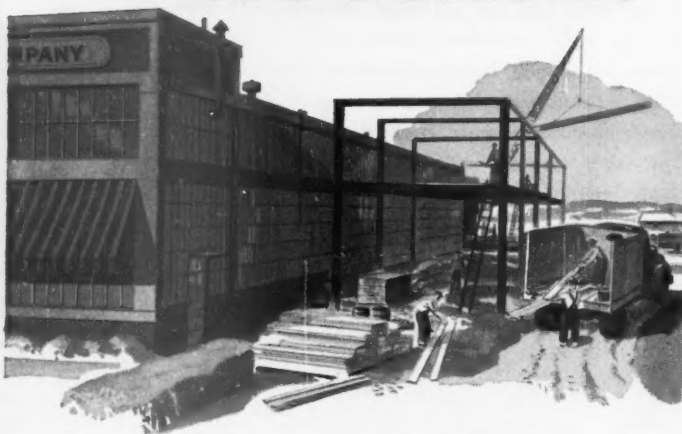
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## DEFENSE BUSINESS BRIEFS

Bismuth joined the controlled materials via NPA order M-48. Beginning Apr. 1, bismuth metal or alloys may be used only for essential purposes named in the order. Producers are required to fill DO orders up to 50% of production and set aside another 20% for reserve.

Copper and aluminum, which escaped last week's orders limiting the amount of steel in consumer durable goods, are under renewed restrictions of another kind. Fabricators of aluminum in the second quarter will be limited to 65% of their base period, the same as in March. Copper fabricators will be limited to 75% of their base period, 5% less than in March.

Dry cell battery makers asked NPA for a 40% increase in copper, zinc, and tin to fill current demands. They're running far behind because the base period for allocating supplies—the first half of 1950—was a period of low output, they say. NPA hasn't promised anything, but seems fairly encouraging.

The molybdenum shortage has another victim—cylinders for high-compression gas. The industry told NPA that military orders have cut off some of its normal sources of supply and that shipments are greatly delayed.

The tool steel industry has asked for a full-fledged NPA program to obtain raw materials, with the privilege of using DO's. The industry's chief concern is over tungsten and molybdenum for steel alloys.

Conveyor equipment makers are six months behind orders due to a scarcity of steel, rubber, and components. The industry asked NPA for help getting scarce materials on the ground that its products save manpower. NPA's reply: Spell out your troubles, and we'll see if anything can be done.

Big aluminum producers will have to divvy up additional pig and ingots with the independent fabricators. Since October, NPA has made the big companies fill DO orders for pig and ingot from the independents up to 64% of output. The new order ups the requirement to 114% of output.

The steel plate industry was urged by NPA to go shopping among the strip and sheet mills for additional output of plate. Defense orders and special programs—such as boxcars, ore boats, and heavy power equipment—are boosting requirements for plate to 700,000 tons a month, NPA told the industry advisory committee.

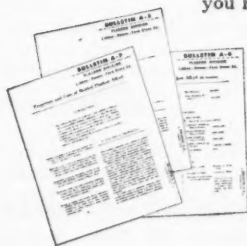


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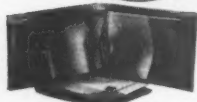
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## U.S. Shifts Stockpile Policy

Washington suddenly gets out of the tin market and engineers a drastic drop in prices. It will do the same thing with other strategic materials as soon as stockpiles reach minimum levels.

The U. S. is in the process of revamping its stockpiling policy.

The government's sudden withdrawal from the tin market last week was the tipoff. In weeks to come, zinc and mercury, and possibly other strategic materials like rubber, will get the same treatment. All told, government stockpilers think a new approach can save taxpayers several billion dollars.

• **Action Overdue**—The tin trade had felt that a switch in policy was long overdue. Just before the start of the Korean fighting, tin was selling for about 75¢ a lb. In eight months, the world market price climbed to \$2.

But the new policy broke the market overnight. Merely by halting purchases, the U. S. has engineered a crash in prices to \$1.40 and less—a drop of 30%. And the price may drop even more.

This week, the government gave the screw another turn. National Production Authority officially designated Reconstruction Finance Corp. as the sole U. S. buyer of tin. This shuts all other U. S. buyers, private and public, out of the market and forces sellers to deal with RFC alone.

• **"Tin at Any Price"**—Government purchasing agents were partly responsible for the jump in tin prices in the first place. In the heat of the emergency, their slogan was "Tin at any price." And even when they had bought enough for near-term needs—at fancy prices—rumors of sales to Russia or to Russia's satellites kept them bidding frantically.

Congress comes in for a share of the blame, too. In the years before Korea, the lawmakers instructed the Munitions Board—the nation's stockpiling agency—to refrain from purchases that might disturb the market. Result: buying that was far short of goals and a stockpile totally inadequate for emergency needs.

Once the fighting in Asia started, Congress hurriedly changed its tune, belabored the Munitions Board for sleeping on the job. Thus goaded, the stockpilers jumped in with both feet, and prices skyrocketed.

• **U. S. on the Hook**—The past six months were a speculator's paradise. But individuals weren't the only ones to make big killings at the expense of the U. S. government. Nations that have never consumed tin in substantial quantities have been accumulating large stocks, then offering them to the U. S. at prices ranging from \$2.25 to \$5 a lb.

In the face of "gouging," Congress

changed its tune again last week. The Senate Preparedness Subcommittee, headed by Lyndon Johnson of Texas, issued a comprehensive report on the tin situation. Its main recommendation: The U. S. should halt purchases of tin until prices return to a "reasonable" level.

• **Sit-and-Wait Policy**—The committee's report caused hardly a ripple in the New York and world tin markets. Foreign producers were sure that U. S. need would overrule a sit-and-wait policy. But two days after the report appeared, the General Services Administration—which was acting for the Munitions Board—announced suspension of buying at current market prices.

Big reason for the withdrawal was that the U. S. stockpile had reached a much higher level than was generally known. If used sparingly, the tin on hand could last as long as three years. The Munitions Board was looking for an excuse to coast on tin to bring prices down. Johnson's report was all it needed.

• **Until the Price Is Right**—Big question now is: If the government has so much tin on hand, is it ready to go back into the market at lower prices? The answer is definitely yes; the Munitions Board still wants to add more metal to its stockpile.

But the price will have to be right. The stockpilers think that \$1.00-\$1.03 per lb. is a right price. And they are prepared to stand pat until the market meets their terms.

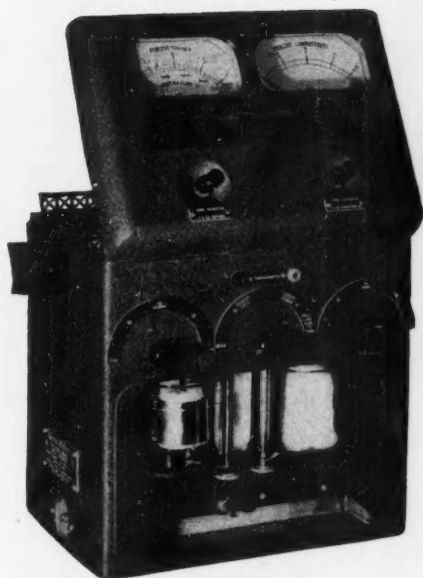
When the price gets down that low—and it probably will in a fairly short time—the government will go back in. But it will stay in only as long as costs don't jump again. In other words, the government has fixed the price it intends to pay and will let the market get in step.

• **More to Come**—The stockpilers are now perfecting plans to extend this system to the other raw materials the U. S. has to buy in world markets.

Sizes of the rubber, mercury, and other strategic reserves are still closely guarded secrets; so it is hard to predict when the government will feel free enough to step out again. Nor will anyone hazard a guess as to what price the U. S. will attempt to dictate.

However, it's a safe bet that, when the withdrawal comes, it will hit the markets with as little advance warning as did the action on tin. And the price drops may be just as great.





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## Freight Car Woe

Even some steel can't be moved, as car builders cry for it, saying that 10,000-a-month quota will soon be imperiled.

The shortage of freight cars was spreading this week, despite a lot of sounds coming from Washington that things were being done about it.

Even the steel mills were feeling the pinch; they told National Production Authority that "several thousand tons" of steel were piling up at the mills for lack of cars to carry them away.

Meanwhile, the freight car builders themselves were wailing that they couldn't get enough steel. They admitted that supplies were adequate to fill next month's 10,000-car quota. But they didn't see how the pace could be maintained through the summer.

• **Cut Rescinded**—Interstate Commerce Commissioner J. Monroe Johnson insists that the steel will come through. He says that the recent cutback in steel for cars (BW—Feb. 24 '51, p. 35) was rescinded on White House orders. The cut—Johnson says it was 35%—was made by NPA. Johnson says NPA had been thinking in terms of 6,500 cars a month rather than 10,000.

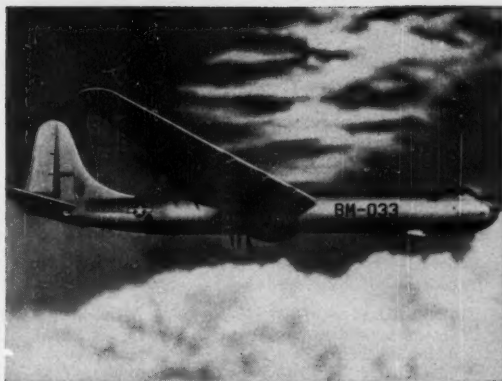
The shortage of cars to move steel and the recent curtailing of flour milling (BW—Mar. 3 '51, p. 20) are only symptoms. The daily over-all gap between shippers' demands and cars available is running between 35,000 and 36,000.

Given sufficient steel, car builders insist that they can turn out 12,500 or more cars a month, not counting the output of the railroad shops. That's the figure that National Security Resources Board said was essential to preparedness, in a survey a year ago. Normally, a production line can produce up to 27 cars a day. But this figure is halved for hoppers for nitrates, sulphur, and cement.

But the builders can't use just any kind of steel. Deliveries must be in balanced "car sets" with many varieties of steel, so that they can be measured, shaped, cut, and punched into all the various parts that go into each car.

• **Labor Scarce**—Manpower scarcities are beginning to plague the builders, too. Pullman Standard has been training women welders at its Butler (Pa.) plant; now 40% of the welders there are specially trained "Rosies."

Agriculture Dept. is joining the warriors over freight cars. Western grain shippers already are clamoring for help, and a new crop will be coming in this June. If Congress approves the shipment of 1-million tons of wheat to India, there will be one more problem.



## When birds don't flock together

All these "birds" fly, but each was developed for a particular job: strategic bombing—overwater reconnaissance—rescue work—interception.

Manufacturers know that Armco steels are developed for special purposes, too. There is one to take and hold a porcelain enamel coating; for a particular job: strategic bombing—overwater an aluminum-coated steel that reflects heat and resists a combination of heat and corrosion; another with a protective zinc coating, that does not peel when severely formed and drawn; and

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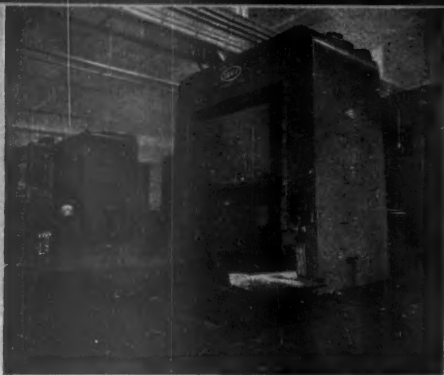
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While all types of steels are scarce now, it will pay you to be familiar with Armco Special-Purpose Steels for your future requirements.

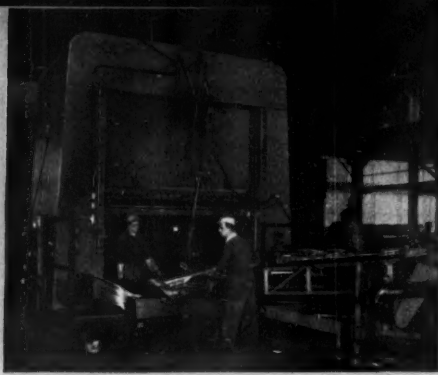
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**UNOBSTRUCTED PRODUCTION AREAS** like the one around these Danly Underdrive Presses are a feature of underdrive press installations—and typical of the efficient working conditions found in the new Buffalo Stamping Plant of the Ford Motor Company.



**FINISHED STAMPINGS** are removed from the press automatically here at the end of the line by an automatic unloading device. This mechanical handling, "Automation," is a Ford development for increased material handling efficiency.

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Danly Underdrive Press design provides maximum head room for crane ways, extra clear working space to facilitate material handling, and keeps nearly all service and maintenance operations on a

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Call a Danly Press Engineer today for a specific discussion of the advantages of Danly Presses on *your* production line.



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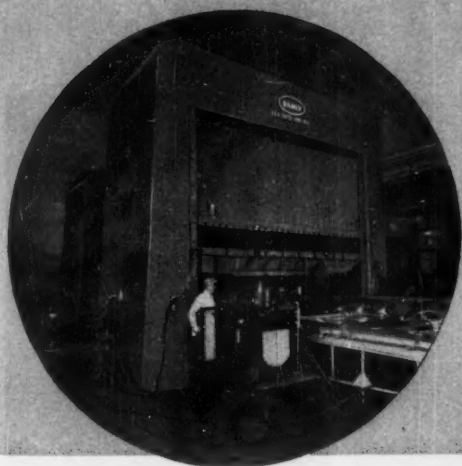
**UNDERDRIVE**

*Mechanical Presses . . . 50 to 3000 tons*



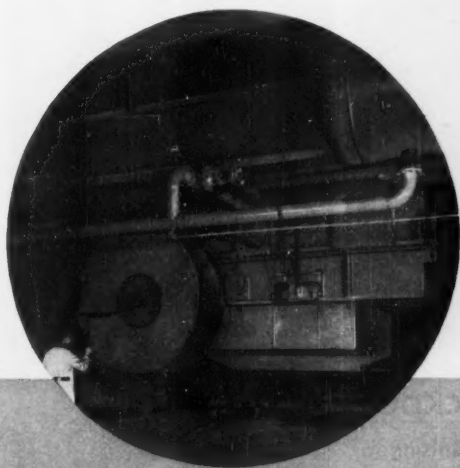
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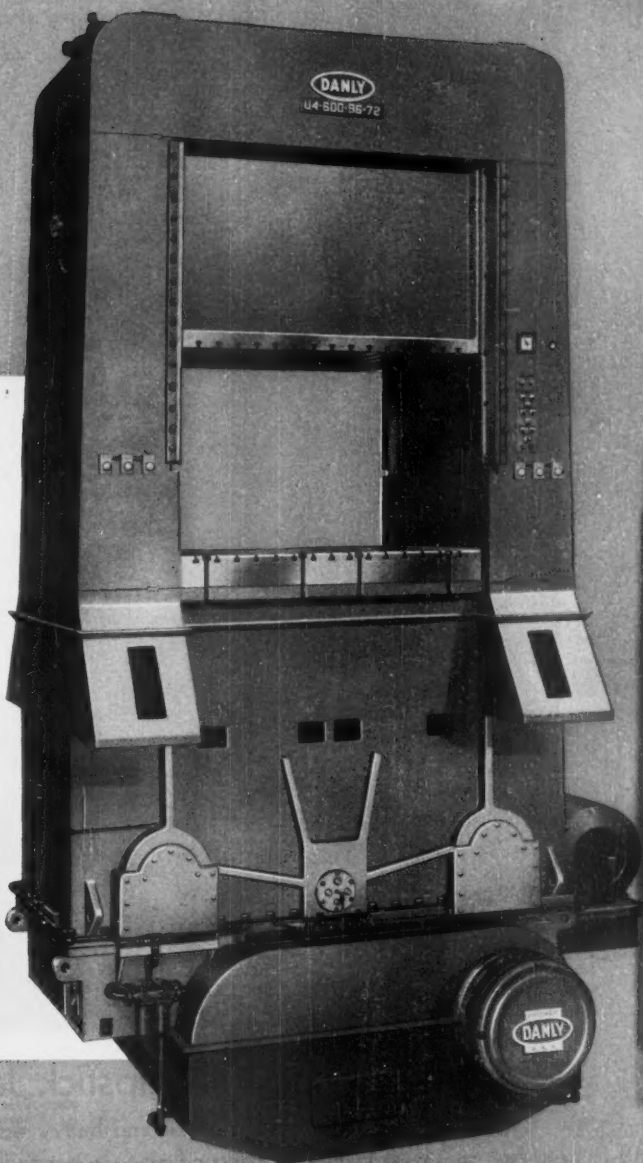


**WORKING LEVEL VIEW** of a Danly 1000 Ton Underdrive Press performing a piercing operation on front floor pans for Ford production. These big stampings are automatically conveyed to the dies by Ford "Automation."

# PRESSES



**SUB-FLOOR VIEW** of Danly Underdrive Press showing clear working space for service and maintenance—obstruction of the working area above is unnecessary. Note the outboard mounted position of the Danly Cool-Running Clutch, simplifying maintenance still further.



**CLEAN FUNCTIONAL DESIGN** above the production level keeps working space open; easy access to all main working parts from the sub-floor level speeds servicing. Friction disc type lining in Danly Cool-Running Clutches and brakes can be completely replaced in less than 30 minutes.

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# PEOPLE



"Finding an answer to . . . lipstick that smears is a game, a challenge—it's fun."



"A woman would just as leave go out without a dress on as without lipstick."



"How kissproof it is depends on the degree of friction."

## Woman Chemist Hits Lipstick Jackpot

Hazel Bishop uses new formula and heavy advertising to get her nonsmear lipstick into second place in national sales.

"After all," says Hazel Bishop, "I am a woman. If you are an organic chemist and a woman, then cosmetics attract you. Finding an answer to a problem like a lipstick that smears is a game, a challenge—it's fun."

• **New Formula**—Hazel Bishop found an answer that is making her more money per year today than the average organic chemist has a right to dream of in a lifetime. Specifically, she

brought out of her laboratory what her boosters claim to be the first new lipstick formula in 40 years.

They say that it is a boon to (1) women, because it won't smear off or eat off; and (2) men, because it won't kiss off (at least not easily), and will leave no tell-tale marks on shirt collars.

• **Sudden Rise**—The new lipstick has been on the market less than a year. By last week it was running second

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3. Are the orders sent in by your branch offices or salesmen rewritten in your office?..... Yes ☐ No ☐
4. Are shipping addresses retyped on your bills of lading?..... Yes ☐ No ☐
5. Are these same addresses again rewritten on your tags and labels?..... Yes ☐ No ☐
6. Are your invoices written separately from your shipping orders?..... Yes ☐ No ☐
7. When a partial shipment is made do you write a new shipping order to cover items back-ordered?..... Yes ☐ No ☐
8. Do you write a new set of billing copies covering each back order shipment?.... Yes ☐ No ☐
9. Do you post each individual invoice to your accounts receivable ledger?..... Yes ☐ No ☐

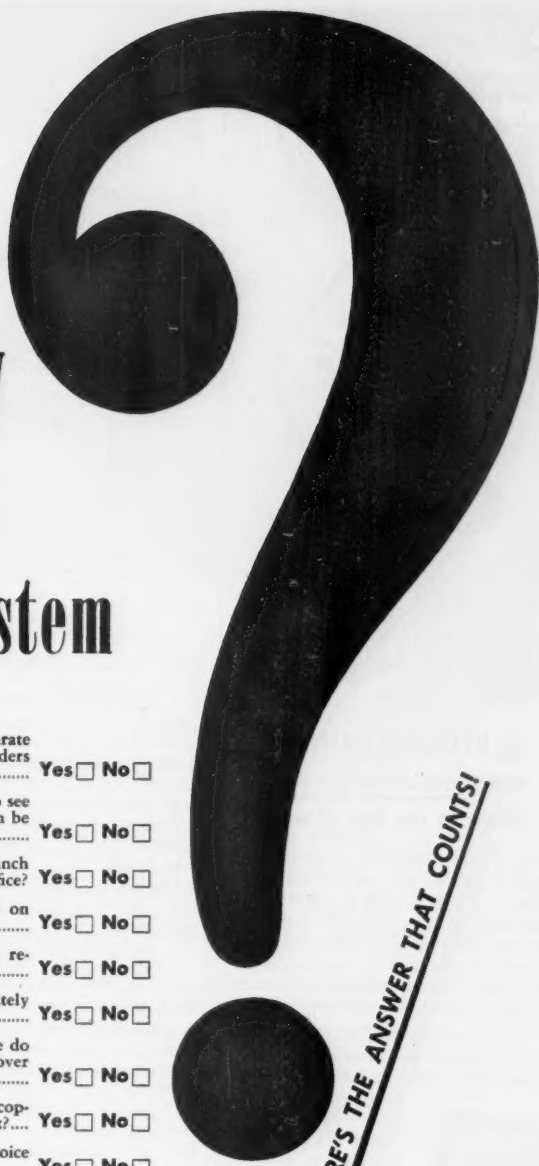


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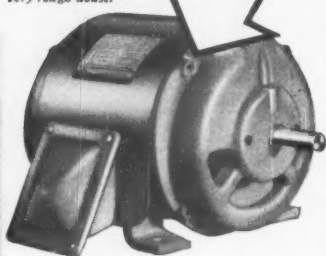
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 THAT COUNT, too!**

Tensile strength of socket head cap screws is at least three times that of standard hex head type. Sockets hold their shape for safe fitting of wrenches, even under very rough abuse.



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"Motor-Drive is More Than Power"



**APPLY LIPSTICK** the same as any other—only keep it within your lipline. Then...

only to Revlon in sales. The company, Hazel Bishop, Inc., expects to gross about \$4-million in 1951. This fact has disturbed some of the best-established people in the cosmetics business. They themselves have been trying to find a formula of their own to match the quality of Hazel Bishop's lipstick before she runs away with the market.

Most of these companies have already brought out new lipsticks with greater staying qualities than average. But Hazel Bishop doesn't think they come up to hers—yet. And she hopes to keep them from doing so by constantly improving her own brand. Even though she is president of the company and chairman of its board, Miss Bishop spends most of her time in the laboratory trying to make her lipstick even better.

• **Quality vs. Noise**—But Hazel Bishop found out that quality alone won't get you into the cosmetics business. Once she had perfected her lipstick (after 309 experiments), the problem was to get it on the market—and she was no businesswoman. Her mother introduced her to a lawyer who agreed to do the job for her. He raised the capital, then spent two years figuring out the packaging. Finally, he placed the lipstick in three department stores.

Three months later, Hazel Bishop, Inc., was bankrupt. But Miss Bishop didn't give up. Through another lawyer, she met Raymond Spector, head of a New York advertising agency and the man who popularized the Lone Ranger. The first thing Spector did was to repack the lipstick. Then he started the biggest national advertising campaign ever concentrated on lipstick (\$1.5-million a year). From there on in it has been gravy for Hazel Bishop, Inc. (and for Hazel Bishop, period).

• **Glamour vs. Science**—Most big wheels in the cosmetics business have some claim to glamour—they make up



**PRESS LIPS** on tissue until no color appears on it. Color will stay on lips and...

Hollywood stars, own strings of race-horses, or have married into foreign nobility. Hazel Bishop has no such background. She was born in Hoboken, N. J., a town 3,000 miles removed from Hollywood, both in geography and in glamour. And even though she is an attractive woman in her early 40's, Miss Bishop hasn't been married to anybody, much less nobility.

But what Miss Bishop did have to qualify her for cosmetics was a sound scientific background. As a matter of fact, the particular career she followed as an organic chemist almost automatically led to a thorough knowledge of what a lipstick should be made of.

• **Preparation**—Originally, she had wanted to be a doctor. She studied as a premedical student at Barnard College, gave up the idea when the depression hit right after her graduation. In 1935, after a stint as a research chemist in the Columbia University research laboratory, she went to work for a dermatologist in New York.

"Life with a dermatologist was fascinating," says Miss Bishop. "But you always are an assistant, and that sometimes isn't enough." World War II gave her a chance to do something besides assist. She went to work for Standard Oil Co., N. J. Her job: to find out why oil deposits form in warplane superchargers. She did, and the cause was corrected.

• **Time to Play**—In 1945 Miss Bishop switched to Socony-Vacuum Oil Co. to do research on oil products. Shortly afterwards, the plant cut down to a five-day week, and Miss Bishop had time on her hands for the first time in years. That was all she needed to get down to doing something practical on her favorite hobby—the improvement of lipstick.

By now Miss Bishop had a lot of scientific experience to match her feminine interest in the subject. When she was working for the dermatologist,





**IT WILL WITHSTAND** even this kind of a rubbing test without smearing.

for example, she learned that some women were so allergic to the perfume in lipstick that they couldn't wear any at all. To Miss Bishop, this was a major tragedy. "A woman would just as leave go out without a dress on as without lipstick," she says.

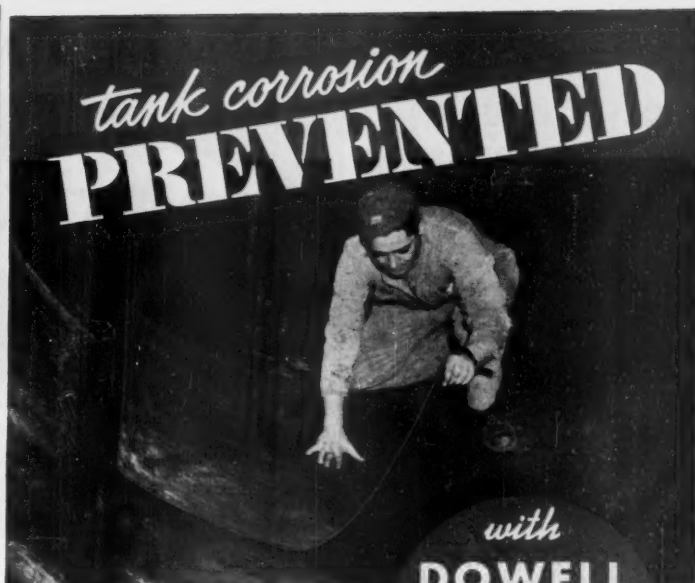
But the problem was to make a lipstick without perfume. Most of them need it because they are based on grease or oil substances, which have an unpleasant smell that must be offset. Miss Bishop found the answer: a lipstick with a lanolin base that has a pleasant enough odor not to need perfume.

• **Manufacturing**—Kolmar Laboratories, biggest lipstick-maker in the U. S., manufactures Hazel Bishop's product, as it does most other lipsticks. Kolmar has secret rooms where the lipstick makers prepare the formula for their particular brands in batches. (Generally only a couple of people know the actual formula, which they carry in their heads.) Kolmar then takes the batch of material and processes it into final lipstick form—including case and package.

With the manufacturing taken care of, the company of Hazel Bishop, Inc., concentrates on sales and distribution, the key to which is advertising. Hazel Bishop sells only lipstick, can concentrate all its promotion on a single item. It is that fact that has been mainly responsible for its success.

• **Syndicate Sales**—Hazel Bishop is the first major lipstick to sell in big syndicate stores, like Woolworth's and Kresge's. (At \$1.10, it's the first lipstick retailing for over 50¢ that Woolworth has sold.) Also, it has only six shades, whereas most lipsticks come in 25 or 30. It can forego color variety because of its nonsmear and "kissproof" features.

But is it really kissproof? If you ask Hazel Bishop that question, she will giggle coyly and say: "How kissproof it is depends on the degree of friction."



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**DOWELL  
SARAN  
RUBBER  
LINING**

- **better corrosion resistance**
- **improved abrasion resistance**
- **easily installed**

Dowell saran rubber has proved to be a superior material for lining storage tanks and process equipment. Developed by The Dow Chemical Company, it has flexibility and strength combined with an extremely high degree of chemical and abrasive resistance. Applications have shown long life with minimum maintenance costs in chemical, petroleum, textile, plating and other industrial plants.

Dowell saran rubber can be easily, quickly and economically applied to equipment *in place*, right in your own plant.

Dowell, a service subsidiary of Dow, not only distributes saran rubber but also offers expert application service or engineering instruction for installation by your own personnel. With stations and offices located throughout the nation, Dowell can give you convenient help on industrial corrosion problems. For more information on saran rubber and Dowell Service, write Dept. 502.

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CORPORATION  
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**BAKER  
BATTERY-POWERED  
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solved 3 problems:**

1. Reduced breakage of fragile goods
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**Baker**  
INDUSTRIAL TRUCKS

# COMMODITIES



LIMESTONE DEPOSITS in Presque Isle County are being exploited to get . . .

## New Sources For Limestone

Steel and chemical expansion programs are already taxing supply of metallurgical-grade rock around Lake Erie. Kelley Island reopens and expands its quarries in Michigan.

The chain reactions set off by the steel expansion program have launched the limestone industry into a stepped-up program of its own.

Under present methods of reducing iron ore to pig iron, limestone is as essential as the ore or the coke, because it acts as a fluxing and purging agent. Calcium and magnesia contained in the limestone combine with the acid impurities in the ore and coke, are removed from the furnace in the form of slag. It takes nearly half a ton of limestone to make a ton of pig iron. And smaller amounts of lime go into the open hearths in steel making.

So when the steel industry announced its expansion plans, producers of the metallurgical grade of limestone started checking their reserves, speeding up production. Kelley Island Lime & Transport Co., Cleveland, jumped right onto the bandwagon.

• **Operation Kelley Island**—Kelley Island is one of the oldest and most conservative of the stone producers. Ralph L. Dickey took over as president in 1940, when the company was on the skids. Dickey plans to spend \$12-million to increase present output of stone and stone products from 3.5-million gross tons to 8-million tons.

But not all the \$12-million will come out of Kelley Island's carefully guarded coffers. Dickey has never hesi-

tated to remind his best customers—practically all the large steel producers except U.S. Steel Corp.—that metallurgical-grade limestone is a pretty scarce commodity. So, if they want to be sure of an adequate supply of quality limestone to keep pace with their increased steel capacity, it might be smart for them to give Kelley Island a financial hand with its expansion plans.

Five steel-making customers (Republic, Bethlehem, Youngstown Sheet & Tube, Wheeling, and Weirton) took the bait. They're assured of limestone; and, at the same time, Kelley Island is assured of customers.

• **Expansion Plans**—Most of the increased production will come from the reopening of quarries in Presque Isle County, Mich., on Lake Huron, where the company has vast reserves of high-quality metallurgical-grade stone.

Estimates of Kelley Island's reserves there aren't available, but it is known that a 140-ft. strata of stone, containing not more than 1% silica, 1.5% alumina, and .1% sulphur, underlies the several hundred acres comprising the company's holdings.

Dickey will spend about \$7-million there, part of it to build a pier large enough to accommodate the 600-ft.-long lake bulk carriers. Capacity will be about 1,800 tons per hour during

the eight months of the lake shipping season.

Kelley Island got its toehold in the area back in 1922, when it acquired some property in Roger City. A small processing plant was already on the property when it was purchased. In 1933 the company expanded by purchasing several hundred acres underlaid with a better quality metallurgical grade of limestone. But it was 15 miles from the plant. And operating with the inefficient plant proved unprofitable, so the quarries and plant were closed in 1947, and the old plant razed in 1949. Dickey will build a new, efficient plant as soon as he can get the materials.

The company will be the third stone producer and processor in the area furnishing limestone to the steel industry. Inland Steel and U.S. Steel are already operating there for their own account.

• **Dickey Has Other Aims**—The steel expansion program dovetails into another project of Kelley Island. Dickey has long been interested in the rapid expansion of the chemical industry along the south shore of Lake Erie in the Painesville-Ashtabula area. Many of the larger plants operating there—including Diamond Alkali and Electro-Metallurgical Division of Union Carbon & Carbide Corp.—use large quantities of lime. Some of the plants have been bringing in lime from as far away as Missouri—an all-rail operation.

That doesn't make sense to Dickey. Especially when he has the products from which a quality lime can be secured, plus the advantage of lake transportation. The company already has a 60,000-ton-per-year lime plant in Buffalo and is thinking of building another. But it's definitely planning a larger plant for the Painesville-Ashtabula area. Competitors don't have to have it spelled out that Dickey is out to capture a share of the lime business in the chemical industry. And from expansions being made in present chemical plants, Kelley Island's lime won't go begging.

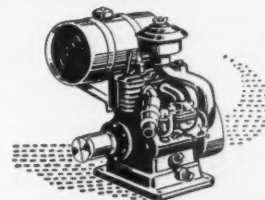
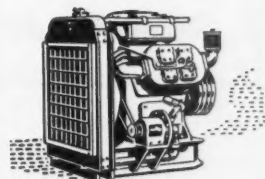
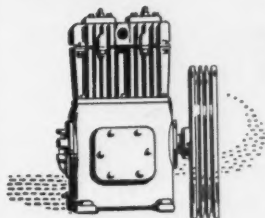
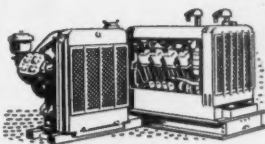
Last item on Dickey's list is a new refractory plant, to double production of its refractory material from dolomite holdings at Gibsonburg, near Toledo.

The company's other divisions will not be directly affected by the expansion program. They include production of agriculture lime, building materials, stone for concrete aggregate, gravel, and sand.

• **Depletion Problems**—Dickey has only one major worry. Back in 1932, the limestone industry was caught napping when other industries were granted the percentage depletion provisions of the income tax law. The law permitted industries that depend upon natural resources for their existence—such as

# Sealed Power Piston Rings

## for all industrial uses



**N**OT just for automatic transmissions and compressors—not just for hydraulic hoists and marine or rail diesels—but for every piston ring purpose!

Sealed Power's leadership in the automotive field has been growing since 1911. Today the manufacturers of more than 80% of all makes of passenger cars and commercial engines use Sealed Power Piston Rings as original equipment. Today's Sealed Power staff and facilities are the finest in the industry.

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You are urged to use Sealed Power's resources to help make your good equipment even better. Write to us in detail about your requirements.

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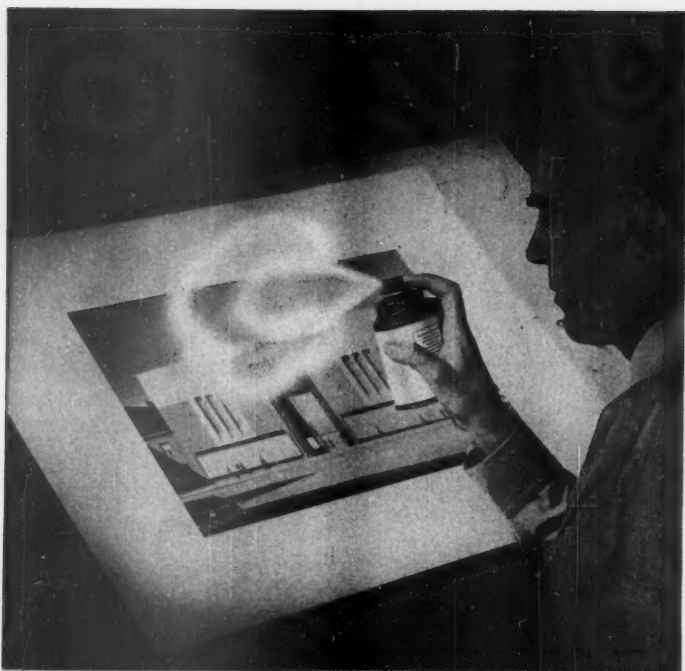
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ARE YOU TAKING ADVANTAGE OF  
THIS NEW INDUSTRIAL USE FOR AEROSOLS?

## They protect documents, drawings, important papers

There are scores of new industrial uses for aerosols . . . pressure-packed products. These contain a propellant that expels the product in the form of a mist of millions of fine particles. The aerosol principle first appeared in the form of insecticidal "bug bombs"—a wartime development—and has since steadily gained popularity both in the home and now in industry. Aerosols save time and money and make dozens of tough jobs easier.

One such product is an aerosol plastic spray pictured above. This produces a thin, long-lasting protective coating that effectively prevents smudging, finger prints, or the harmful effect of dust, dirt, light or humidity upon blueprints, drawings, specifications, documents and the like.

Today, by far the majority of aerosols contain "Freon" propellents. These propellents are safe, of extremely low-order toxicity, nonflammable and insure the satisfactory performance of aerosols of all types. "Freon" safe propellents are a product of E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division, Wilmington 98, Delaware.

**Aerosols widely used today include the familiar insecticides, paints, plastics, lacquers, deodorants, moth-proofers, rust preventatives, waxes. Both conventional and commercial sizes of many of these are available, and plans for manufacturing many more are being considered. The aerosol method of packaging is the modern way of dispensing many products . . . convenient, clean, safe, effective, economical, and it has added sales appeal.**



BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY



**FREON**  
SAFE PROPELLENTS

"Freon" is Du Pont's registered trade-mark for its fluorinated hydrocarbon propellents.

metal mining, coal, and petroleum—to set aside a percentage of their gross earnings without income tax assessment as part of their capital.

The company can cite plenty of examples of depletion. Organized in 1886, it took its name because it owned what it then considered an inexhaustible supply of limestone on Kelley Island—an all-limestone island just off Sandusky.

To be on the safe side, the company soon after acquired a much larger deposit at Marblehead.

The marketable limestone on Kelley Island has been depleted, and all operations there ended years ago. Its reserves at Marblehead in 1912 were estimated as sufficient for the company's requirements for 150 to 200 years. At the present rate of depletion, Marblehead reserves will be exhausted within 50 to 60 years. Shipments are now four times the rate of 1941.

To meet the situation, the industry is financing explorations for the metallurgical grade of stone. But that takes capital; and it'll take a lot more capital to operate the deposits, once they're located. One bug is that most of the rock is so far underground that open-pit quarrying is virtually impossible.

## Pinch on Paper

Buying scramble brings shortage of all stocks—particularly kraft. Plant expansion will help, but only a little.

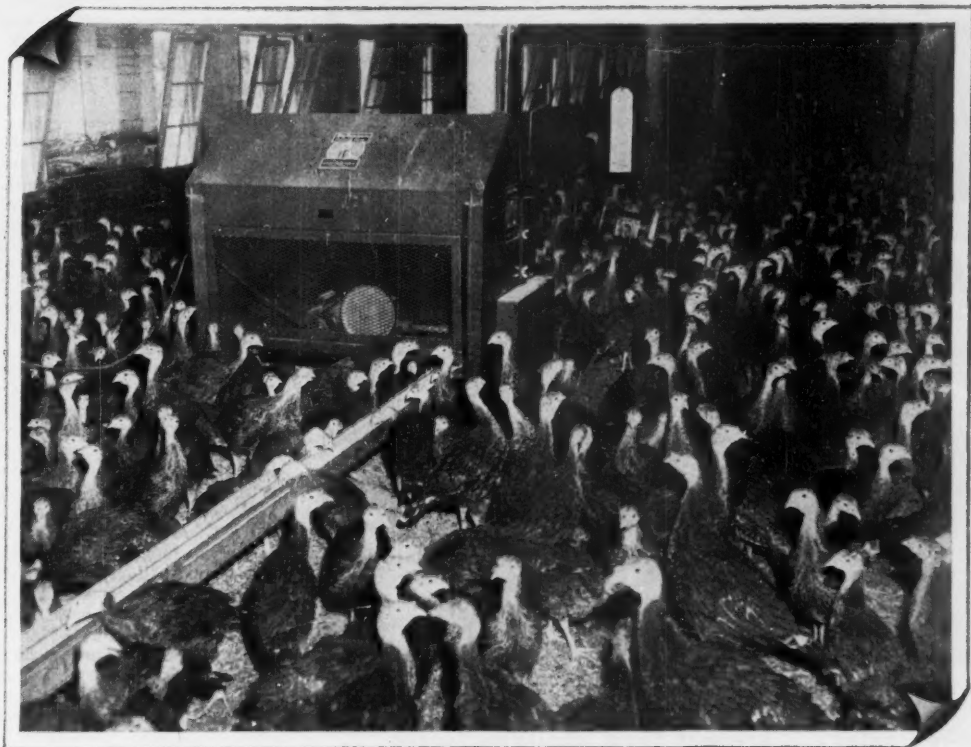
Paper supplies are tight throughout most of industry—and they will probably get tighter in the months ahead. The reason is easy to find: The high level of business activity and fears of shortages have triggered a mad scramble to lay in stocks.

• **Thermometer**—Paper is one commodity that cuts a wide swath throughout all industry. No matter what you make or buy, at some stage it has probably been wrapped in paper. Thus the activity of paper manufacturing parallels the course of all business very closely—so closely, in fact, that the operating rate for paper mills is often used as an index for the entire economy.

Right now, paper operations are running at more than 100% of theoretical capacity. That capacity has already been refueled once to take account of some plants that are now running more than six days a week.

• **Materials Worry**—So, understandably, paper makers have only one big worry: where to get raw materials. Already there's an impending shortage of pulpwood that promises to plague northern mills this fall. Chemical sup-





## Speed Reducers in the Barnyard Mean Better "Eatin'" on the Table!

Baby turkeys are raised in bunches of 10,000 or 20,000 at a time, nowadays. With hardly the touch of a human hand, turkeys or chicks grow right up to your dinner table healthier, more tender and at less cost, thanks to speed reducers, mechanical feeders and other mechanized equipment.

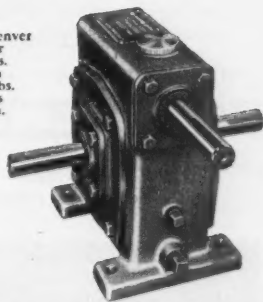
In the growing houses, like the one shown, the heat, air and water are all under automatic control. Feed is trucked in and placed in large hoppers which are connected to a feed conveyor chain, driven by an Eberhardt-Denver Speed Reducer and an electric motor. The chicks just have to stuff themselves, take a drink to wash it down, then

hurry back for more. Some of them get lazy and just peck at the groceries as they go by.

In the turkey house shown, 7500 turkeys are fed on each of two floors with a Big Dutchman Automatic Poultry Feeder installed on DeWitt's Zealand Hatchery, Michigan's largest producer of chicks and turkey poults.

Whether you raise turkeys or build heavy equipment, there is probably a way in which an Eberhardt-Denver Speed Reducer can make it possible for you to do work by machine that is now done by hand. Let our representatives and our engineering department help work out your problems for you.

This Eberhardt-Denver speed reducer weighs 16 lbs. Others weigh up to 1500 lbs. 80 stock sizes made for you. Stocked by distributors throughout the nation.



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☐ Please send full information on how we can use the Eberhardt-Denver Production Delivery Plan.

☐ Please give us some indication of how a speed reducer might be incorporated in the products or machinery described in attached letter.

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Address

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## TYLER REFRIGERATED CASES

*speed sales . . . prevent food spoilage losses . . .  
save time of clerks and customers . . . save dollars!*

*Today's retail food store is a marvel of efficiency, with wide-open Tyler self-service cases making it possible for a constant parade of customers to help themselves in a hurry! Creating tremendous savings! Moving nourishing food in huge volume! Refrigeration at the point of sale is an essential part of this great American distribution system—and Tyler engineering ingenuity has played an important role in its development.*

*This 28-page illustrated booklet gives complete data on Tyler facilities—part of which will be available for defense work.*



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Tyler Contract Dept.  
today!

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**FLEXIBLE PRODUCTION FACILITIES**

**Tyler Fixture Corp., Contract Dept. BW-3, Niles, Michigan**



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plies are also becoming tougher to get hold of—the toughest being sulphur. Unless sulphur shipments pick up, newsprint production faces a 20% cut. But the biggest hurdle of all is wood pulp.

Inventories are down, exports are down, and imports are up—and still there's not enough to meet the frenetic demand. To make matters worse, the price freeze is likely to cut down supplies even further. Pulp is in world-wide demand today, and other countries are willing to pay higher prices than the U.S. ceiling allows. Thus imports this year may not measure up to the one-third of total domestic need they normally supply.

• **Kraft Hardest to Get**—In paper itself, one of the tightest markets is in kraft, the coarse stock used mainly for wrapping and bagging. Ask manufacturers why they can't meet demand, and they point to the growing appetite of the economy. In 1950 coarse paper output was 3.4-million tons—up 21% from 1949. And even that didn't satisfy needs. Now there is absolutely no production slack left; any increase in supply has to come from new plant.

Regionally, supply is more than tight in some areas—it's critical.

Some paper users such as Standard Register Co. have had to curtail operations because of insufficient supplies. And some of the wartime practices are coming back again. Remington-Rand, for instance, is reusing cardboard containers used for shipping-card forms. American Sugar Refining Co. is starting to pack in lighter-weight paper bags, instead of its heavier cardboard box.

• **Emergency Measures**—Despite the pinch, however, there is much that can be done to stretch supplies.

Waste-paper collections in the last war went a long way toward keeping the mills running. Now they are back again. And the jump in the price for waste paper makes them all the easier. A little over a year ago, you could get only about 10¢ for 100 lb. of old newspapers. Now you can get over 10 times that much.

At the peak of World War II, the ratio of wood pulp to waste paper going into paper was 6 to 4. Now it's 7 to 3. That means that by using more waste, pulp can be stretched further.

• **More Capacity**—Of course, the only real way out of a paper shortage is to increase capacity. Expansion for 1951 calls for a boost of 3%. But it's where the increase is taking place that counts.

In newsprint there's practically no expansion at all. The biggest additions to capacity are due where they are needed most: in kraft-grade paper.

New equipment ticketed so far is supposed to boost kraft capacity by 54%. And some programs due to pay off in 1953 are already started.

**Every Minute Meant  
a \$1920 saving**



Big return for a minute's time . . . but to a leading Philadelphia manufacturer\* a 5 minute interview did result in a total saving of \$9600.

This manufacturer faced a problem that's common to many plants today. His ten machines have 560 bearings—560 bearings that must be kept lubricated if production is to be kept uniform, rejects few. That lubrication job was taking four man hours every week and, because of human fallibility, there was always the potential danger that one of these many bearings had been overlooked or under lubricated.

An Alemite Lubrication Engineer was called in. He made his presentation in just 5 minutes—5 minutes that saved \$9600. He told the manufacturer the facts of installing a modern Alemite Centralized Lubrication System. That system is in the plant today. The result: assurance of continuous, correct lubrication, few rejects and shut downs, and the addition of a whole hour's production time every working day.

#### **Call Your Alemite Lubrication Engineer**

No matter what size or type of plant you operate, Alemite can show you

dozens of ways to save through the more efficient handling of petroleum products. Call your local Alemite Industrial Distributor now or send for the free booklet "11 Ways to Cut Production Costs." Simply attach the coupon below to your letterhead. Dept. B-31, 1850 Diversey Parkway, Chicago 14, Illinois.

\*Name on request.

## **ALEMITE**

**MEANS EVERYTHING FOR LUBRICATION**

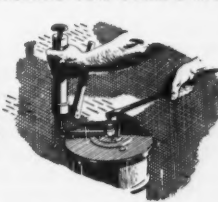
1. Methods 2. Lubricants 3. Equipment

**Another Product of Stewart-Warner**

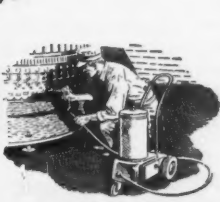
#### **Alemite Cuts Costs 3 Ways**



**1. In transferring lubricants . . .** cuts man hours 63% for every 100 pounds transferred. No mess, no contamination.



**2. In loading grease guns . . .** saves 3¼ man hours for every 100 pounds of lubricant loaded into hand guns.



**3. In applying lubricants . . .** saves up to 23.9 man hours for every 100 pounds of lubricant applied to bearings.

**FREE! Valuable booklet—  
"11 Ways to Cut Production Cost"**

(Simply attach to your letterhead)

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1850 Diversey Parkway, Chicago 14, Ill.**

We'll include facts on the new Alemite Oil-Mist System, too—(OIL-MIST atomizes oil into mist, circulates it to bearings under pressure. Increases life of bearings as much as 17½ times).

Name

Company

City  State





The  
office  
that  
gave me  
a  
sales talk



"Harry Simpson has given me sales talks about his company for several months. A few days ago I was in his building and stopped at his office.

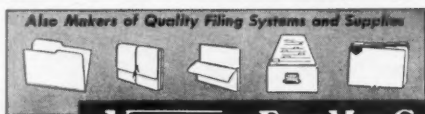
"I have never thought that surroundings made too much difference, but Harry's general office gave me a sales talk that changed my mind. It radiated quiet efficiency and comfort. Not that it was fancy—it just looked like a place where people did things well and enjoyed doing them. That office said to me very clearly—'Simpson knows how to run a business.'"

"The result? Well, Harry has a new customer and I am doing over my office."

"Y and E" equipment can help you make your office into an effective sales tool—and "Y and E" equipment will help get the work done *after* you have made the sale. Call a "Y and E" representative for suggestions and details. Pictured above is an installation of the 6600 line—one of several distinguished lines designed and manufactured by "Y and E."



Write for Steel Desk Catalog No. 3806. There is a "Y and E" representative in your community. Call him for help in planning an effective office.



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A machine for the mechanical scrubbing of plate glass preparatory to silvering for mirrors. Rotating Fullergrit brushes running in a detergent, plus a forced spray of distilled water, leave the glass surface chemically clean. Costly hours of cleaning by hand are eliminated.

In many industries—metal, glass, chemical, wood, food—the answer to numerous problems of economical processing and of materials handling has been found in the use of Fullergrit power brushes. With Fullergrit, the brush ma-

terial is held in a vise-like grip in a metal channel, providing brush strips which may be formed into any size, shape or density. Complete information on how longer-lasting Fullergrit can help you save time and money is available simply by writing to . . . .



3650 MAIN ST., HARTFORD 2, CONN.

## More Castor Oil

To meet defense demands, Agriculture Dept. plans 35-million lb. domestic crop. New seed makes it possible.

Children take castor oil by the teaspoonful. Industry—under mobilization—gulps it by the tank car. Most of the oil goes into lubricants for high-altitude aircraft engines, coatings for military equipment, hydraulic fluids, plastics, and nylon.

• **Domestic Source**—The Munitions Board estimates that defense requirements for the oil will hit 200-million lb. this year—50-million lb. more than annual peacetime needs. The U.S. is already down to a three-month supply. To help meet this new demand, Agriculture Dept. has launched a program to produce about 35-million lb. of castor oil from domestic seed in 1951. Though a drop in the bucket compared with major imports of beans and oil from Brazil, it's a step toward a permanent domestic supply of castor bean.

The stumbling-block so far in growing castor beans domestically has been seed. What you want is a bean that's adaptable to mechanized farming. The bean should be shatterproof, the plant not too big.

• **Just the Bean**—Four years ago, Baker Castor Oil Co., subsidiary of National Lead Co. and largest U.S. processor of castor oil, hired Dr. Wayne Domingo, castor bean researcher for Agriculture Dept. By inbreeding castor plants, Domingo developed seeds that were tailor-made for the U.S. climate.

While Brazilian castor plants grow as high as 30 ft., Baker's stop at about 4 ft. They're grown mostly under irrigation, yield on an average 1,500 lb. of bean an acre—enough to produce about 675 lb. of oil. Along with seed development, Baker has adapted harvesting and peanut-hulling machinery for castor beans, so that the farmer's job is mostly done by machine.

Agriculture's program—for which Baker will supply the seed—sets aside 90,000 acres to 100,000 acres for a castor crop in Oklahoma, Texas, California, and Arizona. Baker will contract with farmers for 58,000 acres; Commodity Credit Corp. will handle the rest. CCC will also help farmers buy machinery and equipment.

• **Tricky**—Castor planting is tricky business. I. M. Colbeth, president of Baker, says, "Seeds can't be handed out promiscuously." By wind pollination, there's crossbreeding and destruction of pure strains that are adapted to a particular soil and climate.



## READERS REPORT

### More About Miss Kellems

Sirs:

The letters in your Feb. 24th issue, page 52, concerning Miss Kellems and her difference of opinion with the Internal Revenue Dept. are interesting and show two sides of the question. There still seems to be one point overlooked.

It is agreed that the withholding method of obtaining income taxes is the most painless. I think everyone will agree that the most painless is probably the most dangerous for our country.

If and when each employee becomes fully aware of how much he is contributing to the support of our government, he will probably exercise, through his right to vote, control that will give us much more efficient government. Is there any one of these employees or employers who would not like to see taxes lowered?

KENNETH E. HUGHES

NEW YORK, N. Y.

### Optimistic Statistic

Sirs:

Was very interested in your response to Robert L. Taylor's suggestion about explaining the figures used in the BUSINESS WEEK index [BW—Mar. 3 '51, p38]. Your explanation about steel ingot operations was exceedingly interesting and pointed. However, when turning to your index as suggested, I could hardly believe my eyes: 1,995% of capacity. Let me hear no more about the steel shortage.

T. H. TAYLOR, JR.

DREXEL HILL, PA.

• With the Mar. 3 issue, we converted the steel production figures from percent of capacity to actual output in tons, but the printers went only halfway with us. This week, the steel shortage is back again (page 13).

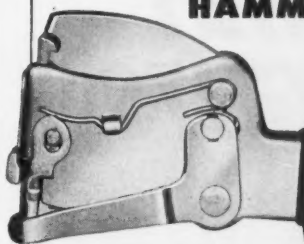
### No Strings Attached

Sirs:

The Jan. 27th issue (page 25) contains an article entitled "Aluminum Kick."

Since there has been some misunderstanding of the Aluminum Co. of Canada, Ltd.'s offer of 440-million pounds of aluminum to the United States government, we should like to point out that this offer was made on an out-and-out firm sales basis without any strings attached. The original delivery terms were for a minimum of 35,000 metric tons in 1951; 65,000 metric tons in 1952; and the balance in 1953. The price quoted was

Now... Bostitch brings you a  
**NEW, IMPROVED  
AUTOMATIC  
STAPLING  
HAMMER!**



**3 TIMES FASTER**  
than ordinary tacking or  
nailing on many building,  
shipping and assembly jobs.

**BOSTITCH H2B HAMMER** is improved twenty ways for continuous, trouble-free service in high-speed tacking and light nailing operations. Drives 1/4" and 3/8", or 1/2" staples.

Now... you can be surer than ever before of getting your tacking and light nailing jobs done faster, at lower cost. Twenty improvements in this new Bostitch H2B self-feeding hammer make its time-tested, one-hand operation even more practical. New accelerated driver multiplies the force of each effortless blow... drives each staple all the way home... into hard or gummy wood without buckling.

New positively locked loading door can't snap open in use... means quicker, easier loading. Other parts are improved, strengthened and plated to prevent jamming, reduce wear and resist rust. Why delay? Switch now from slow tacking and nailing to better, faster Bostitch automatic stapling. One hand free for holding work. No bruised fingers. No mouth infection. Use coupon for more information.



**APPLYING INSULATION** faster and better with a Bostitch H2B stapling hammer. Each easy blow drives a staple all the way home. Fastening in close corners is no problem at all.

**PADDING SHIPPING CRATES** faster and better with a Bostitch H2B stapling hammer. One hand is free for placing the padding and steadying the crate. No fussing with nails or tacks.



**WANT TO CUT YOUR FASTENING COSTS?** More than 800 Bostitch stapling hammers, tackers and machines... 50 years' experience in fastening... 300 field men in 112 key cities in the U. S. and 11 key cities in Canada — all combine to promise a speedy solution to your fastening problem. For specific information, fill in coupon today.

Please attach this coupon to your firm's letterhead

**BOSTITCH**, 708 Mechanic Street, Westerly, R. I.

Please send me literature on the new, improved Bostitch H2B stapling hammer and other specific machines for my fastening needs.

My present fastening method utilizes:

Nails ☐ Glue ☐ Tape ☐ Tacks ☐ Thread ☐ Pins ☐ Rivets ☐ Spot Welds ☐

I fasten the following materials:

Wood ☐ Paper ☐ Rubber ☐ Plastics ☐ Fabrics ☐ Leather ☐ Light Metals ☐

Name..... Title.....

Firm.....

Street.....

City..... Zone..... State.....

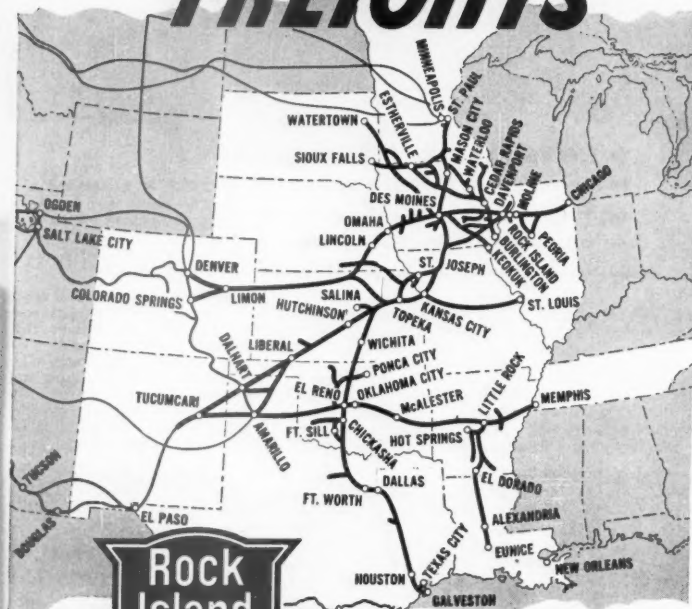
**BOSTITCH®**  
AND FASTER  
fastens it better with wire

ALL TYPES OF MACHINES  
FOR APPLYING STAPLES  
ALL TYPES OF STAPLES  
APPLIED BY MACHINES

# Domain

OF THE DIESEL-POWERED

## ROCKET FREIGHTS



### Antidote for Shipper's Headache

Next time you have a shipment going into (or out of) the territory served by the Rock Island Lines, be sure your instructions read, "Route it Rock Island." For ROCKET FREIGHTS have the speed, power and stamina that shippers like—the combination that means dependability and on-time deliveries. It's *your* kind of service, performed by a railroad that offers you 99 years of practical know-how experience.

*May we tell you more? See your local Rock Island representative.*



## Rock Island Lines

THE ROAD OF PLANNED PROGRESS

16.5 cents U.S. currency per pound f.o.b. Canadian smelter with an allowance for actual freight not exceeding 1 cent per pound. The quoted price of 16.5 cents was the current price prevailing in the U.S. market at the time, and was left unchanged at 16.5 cents although the prevailing market price in the U.S. increased to 18 cents in the six weeks before the offer lapsed.

There were no provisions to cover "purchasing commitments, financing of plant, or allocations of materials for expansion," except, of course, for the purchase of the tonnage offered.

G. O. MORGAN, JR.

ALUMINUM IMPORT CORP.  
NEW YORK, N. Y.

### Horses Maybe?

Sirs:

Your article "L. A. Kills Smog With Kindness" [BW—Feb. 24 '51, p60] only tells half the problem.

Weather conditions set up temperature inversions with higher air temperatures at 500-ft. elevations than at ground levels. This prevents upward movement of eye irritants (aldehydes, nitrous oxides, etc.) from ground levels, where they are produced in good measure by auto, truck, and bus exhaust pipes. Stanford University chemists recently allocated 60% of smog eye-irritating fumes to industrial air pollutants and 40% to automobile engine exhausts and back-yard incinerators. Fuel burned in back-yard incinerators is trifling in comparison to fuel burned in immensely overgrown L.A. traffic.

After all the industries make the clear list, LACAPCD (Los Angeles County Air Pollution Control District) will still be "waiting at the church" unless it finds an answer for cleaning up automobile exhaust gases.

O. W. OTT

LOS ANGELES, CALIF.

### Red Face Dept.

Sirs:

On opening BUSINESS WEEK for Feb. 24, I was very much pleased to see the pictures of our dust suppressor installation in Los Angeles. But, on going through the article, it was very disappointing to find you referred to us as the "Whitman Corp." in no less than six points in the article.

A. DEYOUNG

WHITING CORP.,  
HARVEY, ILL.

• Whitting Corp. devised the system for cutting down foundry dust and fumes that was installed at General Metals Corp., Los Angeles. The equipment reduces air pollution to about one-fiftieth of the amount allowed by Los Angeles County Air Pollution Control District.

NATIONALLY FAMOUS

# air-wick mist

*Now pressure packed  
in the New 6oz. TALL*

**CROWN**  
**SPRA-TAINER**



Widespread use of products that s-p-r-a-y was first made possible by Crown's invention of lightweight, low-cost Spra-tainer, a can specially constructed for pressure-packaging only.

Crown Spra-tainer is first on the Market, first

in Sales because of exclusive "No Side Seam — No Top Seam" construction for utmost strength.

Look to Crown's inventive genius and mechanical skill for continued leadership in the manufacture of fine Cans for all products.

Mail this coupon today to:  
Crown Can Co.,  
Erie Ave. at H St.,  
Phila. 34, Pa.

Send me more information on Spra-tainer.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Firm \_\_\_\_\_

**CROWN CAN**  
DIVISION OF CROWN CORK & SEAL COMPANY

One of America's Largest Can Manufacturers • Plants at Philadelphia, Chicago, Orlando • Branch Offices: New York, Baltimore, Pittsburgh, St. Louis



## ***For Packing Glass Containers***

Standard-Knapp equipment is high speed, precise and economical. Containers are under complete control throughout the operation. Load forming is automatically regulated to assure a full pack for every case. Damage to containers or cases is eliminated.

Standard-Knapp Bottle Packers are more than equal to the challenge of higher production at lower costs. That is why they are the first choice with leading manufacturers and processors of food, beer, carbonated beverages, and chemicals.

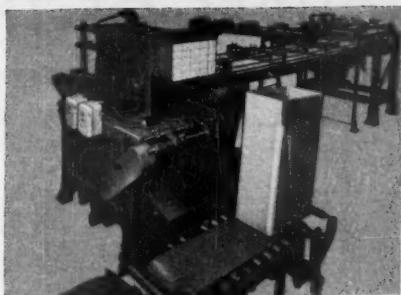
# ***Only the best is***

### **PRODUCTS OF OUR ASSOCIATES INCLUDE:**

 <p>PLASTIC BOTTLES, RODS, TUBES, SPECIAL SHAPES <b>PLAX CORPORATION</b> <i>Subsidiary of Hartford-Empire Company</i> HARTFORD 1, CONNECTICUT</p>	 <p>PREMIUM QUALITY STAMPING PRESSES <b>THE V &amp; O PRESS CO.</b> <i>Division of Hartford-Empire Company</i> HUDSON, NEW YORK</p>	 <p>HIGH SPEED AUTOMATIC PRESSES <b>HENRY &amp; WRIGHT</b> <i>Division of Hartford-Empire Company</i> HARTFORD 5, CONNECTICUT</p>	 <p>GLASS MAKING MACHINES <b>GLASS DIVISION</b> <i>Hartford-Empire Company</i> HARTFORD 2, CONNECTICUT</p>
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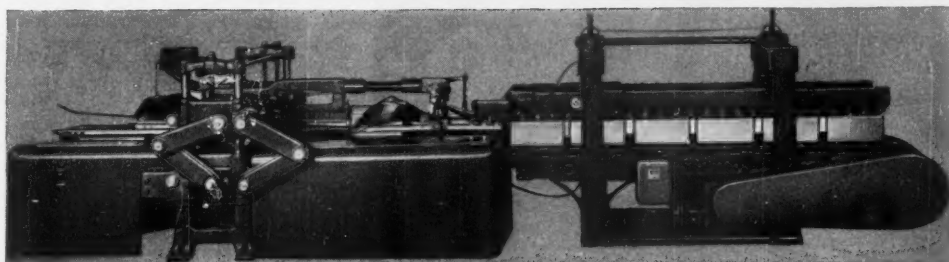


# ***In the field of automatic packaging equipment***



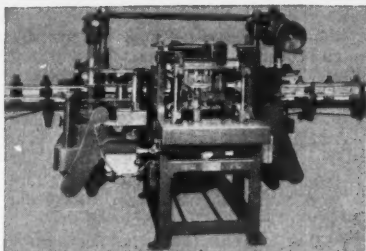
## ***For Packing Cartons***

Standard-Knapp equipment is preferred for its high speed, safe handling and adaptability to varying load patterns. Standard-Knapp Carton Packers are used by foremost manufacturers of soaps, chemicals, cigarettes, pharmaceuticals and cosmetics.



## ***For Glueing and Sealing***

Standard-Knapp machines have set the standard of performance for years. If you have heard of gluers and sealers, you have heard of Standard-Knapp.



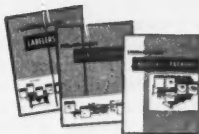
## ***For Automatic Labeling***

of glass and tin containers, it's Standard-Knapp equipment for neat, clean and tight label application. In the food field, where high quality labeling is a must, Standard-Knapp Labelers are preferred.

# ***good enough***

### **FACT-PACKED CATALOGS**

Want to review Standard-Knapp automatic packaging machines in detail? Our catalogs will give you some eye-opening facts. Please write Dept. B, Standard-Knapp, Portland, Connecticut.



**STANDARD-KNAPP**

DIVISION OF  
HARTFORD-EMPIRE COMPANY

PORTLAND, CONNECTICUT

# FIGURES OF THE WEEK



CONSTRUCTION and its statistics are scattered all over the map. It makes . . .

## Building: Tricky to Measure

Unless you live in a tent in the middle of a jungle, you can't get away from the construction industry. You live in its products, work in them, drive on them, educate your kids in them, get your gas and water through them. They're practically everywhere.

• **Hard to Collect**—All this is handy when you want to buy a bottle of beer, get in out of the rain, or go home. But it makes it pretty tough to collect any significant figures on the industry. Getting steel or auto figures is a push-over by comparison. You only have to cover a dozen firms in each of those industries to get nearly all the output.

But in construction, even if you want to know only about the big stuff, you still have to keep tabs on at least 1,000 contractors. If you want to get down to the smaller operations, you'll

find more than 6,000 general contractors who are doing at least \$25,000 worth of construction a year.

When you get to subcontractors, you're dealing with more than 200,000 firms altogether. But that still doesn't cover it all. You then have to consider the companies—du Pont is an example—who do their own construction.

Despite all this, there are figures—and good ones—available for construction. Hunt and you can find statistics on every phase of building anyone might want to know about.

• **Sources**—Construction figures come from a number of sources. The basis for BUSINESS WEEK's own figure in Figures of the Week is those prepared by Engineering News-Record, a McGraw-Hill publication. Besides these, F. W. Dodge Corp. provides a whole string

of figures—in many ways the most complete available. Practically every state, county, and local building association also puts out reports. And the federal government has it figures.

BUSINESS WEEK presents a four-week daily average of all engineering construction contract awards as reported by Engineering News-Record. Each week ENR reports its total to BW. Then the totals for the past four weeks are added together and divided by the number of working days during that particular four-week period. The quotient is the Figure of the Week.

• **Adjusted**—What BUSINESS WEEK is reporting then is the average dollar value of contracts awarded on each working day during the previous four-week period. If BW each week simply published ENR's figure untouched, severe peaks and troughs would result. That's because construction jobs have such an extreme size range that one big contract—for a Coulee Dam or a Paducah atom plant—can throw a whole week's figures completely out of whack. The week that F. H. McGraw & Co. got the Atomic Energy Commission contract at Paducah, Ky.—considered to be the largest ever awarded to a single contractor—was far from typical of even the most active weeks. But BW's moving average takes this element out of the picture and gives a profile of the general situation with no unusually large or small weeks hogging the scene.

• **What It Measures**—The Figure of the Week, however, doesn't measure all construction—because Engineering News-Record doesn't either. It measures heavy construction. ENR breaks down construction into four categories and leaves out the smaller jobs in each. The categories are: (1) buildings; (2) public works; (3) private and utility works; and (4) waterworks, earthwork, drainage, and waterways.

The buildings category includes three classes: industrial with a minimum size of \$82,000; public; and commercial. The last two have a \$300,000 minimum.

Public works takes in public works other than government buildings, except that it doesn't include anything in the waterworks-earthworks category; minimum for the group is \$60,000. The private-and-utility-works category carries a minimum of \$60,000 and includes pipelines, airports, railroads, and the like. Waterways-earthworks has a minimum of \$34,000.

In setting up these categories, ENR admits it is eliminating some important kinds of construction, including practically all housing except big projects. But they are the small stuff relatively, and not the kind in which its engineer readers are primarily interested. ENR figures it is including somewhere be-



## **May we help with the dishes?**

It's really not much of a favor. Washing dishes is no chore any more, with the new synthetic detergents that we've symbolized with the little oil refinery in the sink. These new best-sellers make water wetter, cut into dirt, emulsify fat, never leave a grease ring.

And these synthetic detergents are just a part of the wonders of petroleum chemicals. The young lady's plastic apron, the rubber rack on which she piles the dishes, they too are made with the help of petroleum chemicals. There is even a chance that petroleum chemicals were used to clean her shiny chrome spigots before plating. And certainly her scouring powder and her laundry detergent were made with petroleum based synthetic detergents.

Petroleum chemicals are an important part of Atlantic's business. These chemicals have speeded processing and bettered products in many industries . . . how about yours?

Write to: Chemical Products Section, The Atlantic Refining Company, 260 S. Broad Street, Philadelphia 1, Pennsylvania.

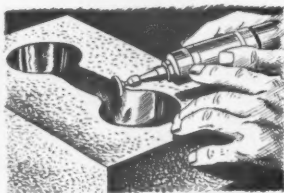




(IT HAS TO BE HEARD TO BE APPRECIATED)

## WHAT IS IT?

☐ a mine detector    ☐ a whistling teakettle    ☐ a telephone



**ITS SHAPE** comes from highly polished molds which get their finishing touches from mounted wheels and points made of Norton Alundum\* abrasive... an abrasive widely used for grinding very hard metals.



**COMPONENT PARTS** are given a smooth and wear-resistant finish by precision tumbling with Norton Alundum abrasive... a tough, hard, long-lasting tumbling medium for metals, alloys, and plastics.

**YOU'RE RIGHT...** it is a telephone hand set... one of many everyday conveniences that perform better because of their contact with products of Norton, world's largest manufacturer of abrasives and abrasive products.

\*Trade-Mark Reg. U. S. Pat. Off. and Foreign Countries



TRADE MARK REG. U. S. PAT. OFF.

*Making better products to make other products better*



**NORTON COMPANY, WORCESTER 6, MASSACHUSETTS**

BEHR-MANNING, TROY, N. Y. IS A DIVISION OF NORTON COMPANY

tween 40% and 50% of the value of all private jobs, and roughly 70% of all public ones.

• **Reporting**—Construction statistics aren't like steel figures. Every steel company reports weekly to the Iron & Steel Institute (BW—Mar. 3 '51, p38), but there is no such official source for information about construction contracts. Gathering the information is a matter of hour by hour reporting all over the country. To do this, ENR has a staff of about 100 reporters, picked because they are in strategic spots to spot jobs as they come along. A typical reporter may be a building-material salesman or an employee of a city engineers office in charge of building permits. He may be a newspaper's real estate editor.

Whoever he is, in order to do an accurate job he has to have a system of checks and cross-checks. His information can come from engineers, architects, and contractors in the area, the local municipal building departments, material suppliers, equipment renters, and dozens of other places. In each case he has to follow up his lead and report the progress at every stage up to the award of the contract.

• **How It's Used**—When a report comes to ENR, it must be screened to make sure it is above the minimum size. ENR then puts the information into its Construction Daily, a publication that gives the vital facts about each project, by categories, at every stage from its proposal to the contract award.

A contract award—for anyone who hasn't given or received one—is the final official, legal designation of the concern that gets to build the project, and the price it will be paid.

When the figure for awards appears in Figures of the Week, it has been combined and smoothed; so it can serve as nothing more than a general economic indicator. Anyone who looks at it can get an accurate idea of how well the middle and big end of the industry has been doing in the past four weeks. But it doesn't tell the contractor or supplier in a particular area or in a special type of construction, like small homes, how his segment of the business is doing. That kind of information comes from other sources.

• **Details**—ENR supplies a lot of it in its regular weekly editions. It lists the dollar value of contracts awarded in each of its categories for the current week. It also publishes cost indexes and figures on sources of building capital. Besides these, each weekly issue carries reports on major work in progress.

ENR's Construction Daily lists all the construction progress reports that are used to make the statistics, and now it has begun publishing a good share of the figures themselves. It is

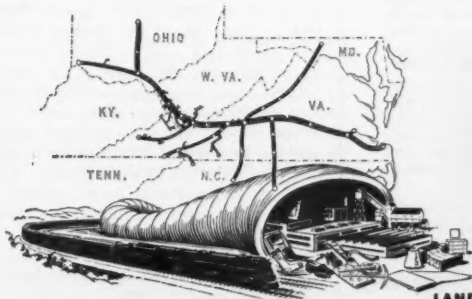


**WHERE  
WILL YOU BE  
AT 5:15?**

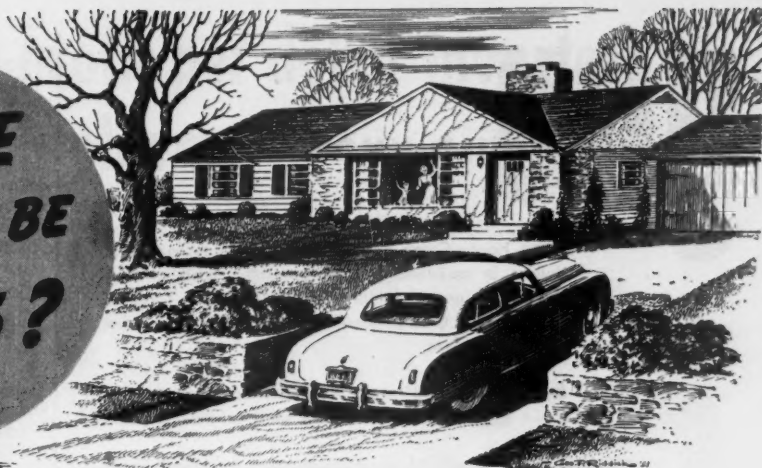


**50 YEARS OF EXPERIENCE—  
YOURS FOR THE ASKING!**

Available to you at any time are the services of the Norfolk and Western's plant location specialists whose department has had 50 years' experience. These men have worked with thousands of manufacturers on plant location problems. They understand manufacturing problems as related to location. They will give you the data you will require about any section of The Land of Plenty. They will work for you quietly, promptly and reliably. Write the Industrial and Agricultural Dept., Drawer B-402, Norfolk and Western Railway, Roanoke, Va.



LAND OF PLENTY



## **YOU GET A BONUS ON YOUR TIME IN THE *Land of Plenty*\***

In centralized areas, Executive and Employee face pretty much the same problem each day —

— the *Rush and Crush* of getting to work, and the *Crush and Rush* of getting home from work —

— crowded commuter trains . . . snarling traffic . . . "needle in the haystack" parking places . . . and other related hurdles which devour valuable hours and take the starch out of a man.

*Not so in The Land of Plenty!*

When "quitting time" arrives here, executives and workers have no "getting home" problems. While you are fighting the *Battle of the Subway* in crowded areas, your counterpart in *The Land of Plenty* has just finished watering the radishes, or is approaching the third hole of a fine course *near his home*.

Better living? You bet! And well worth considering when you and your associates are deciding where to put that new plant.

Think this over — *some day at 5:15 . . .*

# **Norfolk and Western RAILWAY**

\*The Land of Plenty — the six great states served by the Norfolk and Western — Virginia, West Virginia, Ohio, North Carolina, Maryland and Kentucky.

# you SHOULD KNOW

**how** Honan-Crane oil purification saves thousands of dollars in maintenance and operating costs on Hydraulic equipment, Metal Working machines, Turbines, Transformers, Gas & Diesel Engines, Air Filters, Metal Rolling Mills, etc.

**how** "Clean Oil" stops downtime on machines, cuts down rejects, stops unnecessary wear on moving parts.

**how** savings in oil alone quickly pays for Honan-Crane oil purification equipment, makes it the best capital investment.

• Write today for your copy of this interesting and valuable new booklet *The Facts about "Clean Oil."*



## HONAN-CRANE CORPORATION

824 Wabash Avenue, Lebanon, Indiana

• Subsidiary of

HOUDAILLE-HERSHEY CORPORATION

## SHOPPING FOR EXHIBIT CASES ?



**BUYERS** of exhibit cases everywhere are choosing Michaels "Time-Tight" Cases because they are tops in design, quality, structural features, appearance and usefulness.

Michaels cases offer Innerlocking Frames, an exclusive feature; fully mitered intersections; no screws exposed on face of frames, and other structural advantages.

These cases are designed for maximum visibility; to enhance the appearance of exhibits; to eliminate handling and theft

as well as the ingress of dust, vermin and moisture. They are made in a wide variety of styles (table, aisle, wall, corner, suspended and recessed) and in any practical size to take care of virtually all exhibit requirements. If it is necessary to meet specific needs, Michaels will design and build special cases to your specifications.

"Time-Tight" Cases are used extensively in museums, art galleries, libraries, universities, colleges, schools, clubs, banks, federal, state and municipal buildings, science laboratories, institutions and various industrial and related types of display rooms.

Write for literature which contains complete information.

### MUSEUM CASE DIVISION OF

**The MICHAELS ART BRONZE CO., Inc., 232 Scott St., Covington, Ky.**

Manufacturers since 1870 of many products in Bronze, Aluminum and other Metals

used by people who are interested in the actual projects. Some part of its information is used in just about every phase of the industry.

• **And Outside the Industry**—There are many less obvious users, too. About 15 years ago, a boy who was working for an eastern railroad came into the daily office and surprised everyone by asking if he could subscribe. He laid down a pile of coins on the editor's desk (probably the best part of his week's salary, since the subscription price then was \$10 a month) and became a regular reader. Occasionally he would drop into the office for conversation, and finally one day he was persuaded to tell why he had subscribed. The railroad wasn't doing well, so it had been running a contest, awarding prizes and bonuses to employees who could drum up new business. The boy was using the daily to lead him to construction equipment and material suppliers who would be shipping stuff to jobs listed in the daily. He turned in so much business he was investigated to find out how he was digging it up.

• **Dodge Figures**—Another major supplier of construction figures is F. W. Dodge Corp. Dodge puts out a series of reports, bulletins, and services that document the industry from top to bottom, including the smallest home builders. *BUSINESS WEEK* uses the ENR figures because they are available on a weekly basis, while Dodge's come out only three times a month. Although Dodge figures cover the entire field rather than just ENR's larger jobs, its service includes only the 37 eastern states; ENR furnishes information on the entire U. S., but neither source actually gives the entire story.

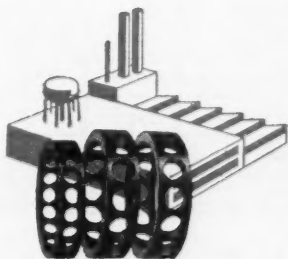
Over a long period, Dodge and ENR figures generally follow parallel courses. But since they are made up of somewhat different components, their rates of rise and fall often vary. In periods of big industrial expansion, ENR's concentration on the bigger jobs will cause its figure to rise more sharply than Dodge's. But where home construction is the major element, the Dodge figure reacts faster.

• **U.S. Adds More**—The U.S. Depts. of Commerce and Labor put out a complete set of construction figures—work put in place—based on Dodge, ENR, and other data. These figures are adjusted for peaks and troughs, for duplications, and for about anything else that might go wrong. They cover the entire construction field and are probably the best available picture of trends and developments in the industry. But they are available only once a month.

For an up-to-the-minute picture then, the businessman has to turn to the other sources. Turning to page 13, *Figures of the Week*, will give him a capsize view of them.

Where profit per dollar invested  
is your problem

# micarta is basic!



ALL INDUSTRIES

Ball bearings with MICARTA retainer rings are doing vital jobs in all industries. These MICARTA rings are true precision products matching the finest bearings in accurate tolerances. Why not look into MICARTA's rare combination of physical properties for your own applications?

Efficiency and profit live together. They both depend on top performance of vital equipment. MICARTA® contributes to both by working better and longer than metal. It is a tough and resilient basic material . . . a solid and workable plastic.

MICARTA swallows sound and vibration. It knows no corrosion. It resists heat and pressure.

MICARTA is an ideal insulator . . . can be fabricated to the last degree of accuracy, easier and more economically than metal.

MICARTA is one of industry's most versatile materials. It can add to your profit picture. Westinghouse Electric Corporation, Micarta Division, Trafford, Pennsylvania.

J-06442



# REGIONAL REPORT



Federal Reserve District	January 1951	December 1950	January 1950	Federal Reserve District	January 1951	December 1950	January 1950
1. Boston	221.6	215.7	188.6	8. St. Louis	263.3	263.0	223.0
2. New York	235.5	235.4	202.0	9. Minneapolis	288.0	291.2	238.9
3. Philadelphia	238.4	238.7	202.4	10. Kansas City	319.6	313.4	259.6
4. Cleveland	255.1	245.9	209.6	11. Dallas	341.7	334.7	283.5
5. Richmond	261.0	262.2	221.5	12. San Francisco	292.9	291.2	243.7
6. Atlanta	296.7	294.8	253.1	U.S. Composite	264.7	262.6	222.1
7. Chicago	265.8	265.1	220.3	1941 = 100 adjusted for seasonal January figures preliminary, December revised			

## Income Rise Flattens Out Temporarily

**T**HE RISE in income flattened out in January—as expected. The rise in manufacturing payrolls was more than enough to make up for the sizable drop in retail employment. So overall income rose a bit less than 1%, as compared with a jump of almost 2% in December.

Income prospects for the next few months are good; the index should rise more quickly. The principal reason is that defense business is finally beginning to make itself felt. The heavily industrialized Cleveland region and the Dallas region already show the effects

of war contracts, and the same thing should show up soon in the other industrial districts, particularly Chicago and San Francisco.

One possible weakness in the over-all economy: Retailers are getting more and more worried that their shelves and warehouses will still be loaded with merchandise after Easter. That would mean a cutback in their buying.

The continued strength of civilian-goods industries should help to keep things booming. Materials shortages haven't hurt nearly so much as they were expected to.

Another bullish factor is the improvement in farm-income prospects. The weather has been better over the major portion of the important winter-wheat belt.

One result of the combination of good farm income and industrial expansion is that the Kansas City region now leads in percentage of gain in income over a year ago. Cleveland is second and Chicago third. The New York region shows the least gain.

Since June, the last month before Korea, the Kansas City region again has gained the most, followed by the

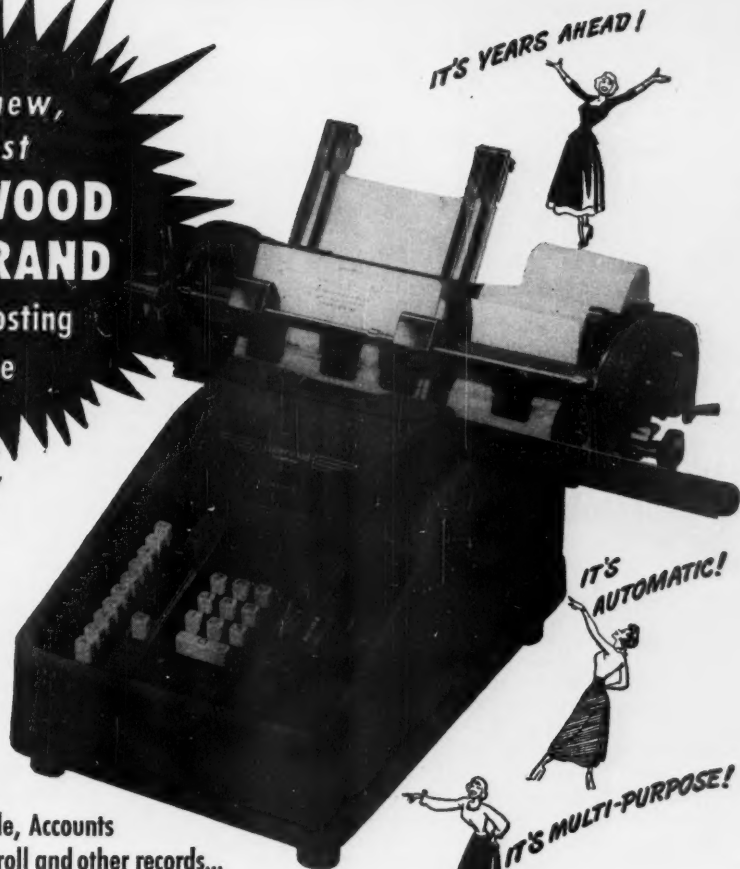


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**UNDERWOOD  
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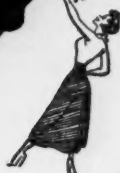
... an amazing, compact,  
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Payable, General Ledger, Payroll and other records...  
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AUTOMATIC!



IT'S MULTI-PURPOSE!



Here truly is the real bookkeeping machine value of this or any other year! Never before have so many automatic, time-saving features been combined in a posting machine at so low a price.

Now, this all-new Underwood Sundstrand makes machine posting practical and profitable for the smallest business ... even those having but few postings per day.

In addition to posting jobs, the same Underwood Sundstrand Portable Posting Machine can be used to extend or verify invoices, calculate discounts, figure percentages or do any other figuring job that involves addition, subtraction, multiplication or division.

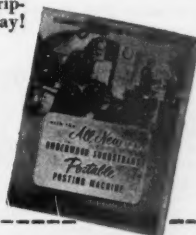
#### AUTOMATIC OPERATION

This new Underwood Sundstrand Portable Posting Machine virtually "thinks" for itself ... the interchangeable Control Plate tells the machine what to do and when to do it. There are 14 distinct automatic operations including automatic printing of dates and descriptive symbols ... automatic tabulation ... auto-

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#### SIMPLE TO OPERATE

Notice, there are only 10 numeral keys ... arranged in logical sequence under the fingertips of one hand. No long training period for operators. Your present office workers learn this machine ... develop a speedy "touch method" ... after just a few minutes' practice.



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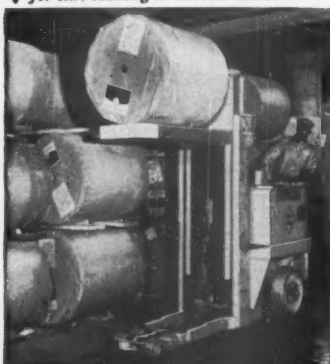
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Handling 2300 lb. paper rolls and other printing supplies, this publisher gained three benefits with E-P trucks: 1. *Faster Work with Less Labor*—Mechanized handling has freed 3 men for other duties and upped production one quarter. 2. *Savings in Space*—Elwell-Parkers tier rolls up to 4 high—2 were the limit when done manually. 3. *Greater Safety*—Hazardous lifting has been eliminated. Also, damage to paper is minimized.

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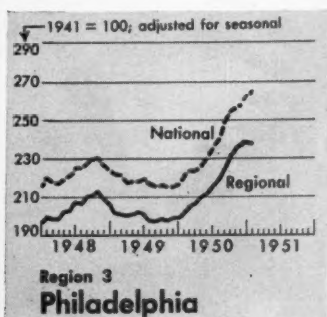
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**ELWELL-PARKER**  
Power Industrial Trucks  
Since 1906

Dallas and Chicago regions. The two southeastern regions, Richmond and Atlanta, have gained the least.



INCOME has been rising steadily ever since fall; it leveled off in January because the continued rise in factory payrolls only just managed to keep abreast of the seasonal drop in retail trade. February figures are likely to show a resumption of the over-all rise.

The stretch of Delaware River shoreline between Philadelphia and Trenton is probably the fastest-growing industrial area in the country. U.S. Steel started it, of course; work on its Morrisville mill has been under way since fall (though ground wasn't broken officially until this month). National Steel is nearly ready to start work on its new 4,000-man mill at Paulsboro. A Swedish firm, Hoesanaes Sponge Iron & Metal Powder Corp., is now building a \$4-million plant near Riverton, N. J. There are rumors that both Republic Steel and General Refractories will build in the area. The Pennsylvania R.R. (which assembled the site for U.S. Steel) has just bought 227 acres near Morrisville; it won't say why.

Morrisville itself is a real boom town. The bank literally isn't large enough to handle all the business; it's doubling the size of its building just to get its customers in out of the rain. Real estate, both in town and nearby, is sky high. Two big home-building contractors are trying to outbid each other for 1,500 acres of Bucks County farmland.

In the Philadelphia-Camden area, total employment is at a new peak of 1,550,000, about 14% above the wartime high. Unemployment is only 70,000—practically the irreducible minimum for an area this size. But factory employment is only 39% of the total today, compared with 48% during the war. This shows there is still room for growth—either by hiring marginal workers or by luring men from nonmanufacturing into manufacturing jobs.

Several new military installations are creating purchasing power in Pennsylvania. The reactivated Indiantown Gap Military Reservation will train some

14,000 infantry replacements at a clip. 700 civilians will be permanently employed. Middletown Air Depot is adding 4,500 new workers; Mechanicsburg Naval Depot about 1,100. Chambersburg Ordnance Depot is hiring better than 100 a week. The Signal Corps is about to start work on a new \$29-million depot at Tobyhanna; the 5,000-man construction payroll will be a shot in the arm for this lagging hard-coal area. But in nearby Schuylkill County, closing of a deep-level mine because of high costs has thrown 225 out of work.

Recovery at Altoona continues; latest addition is a 100-man paper-box factory. Among the other new plants in Pennsylvania: A \$30-million, 7,500-man aircraft-engine plant at Reading is in the talk stage; Philadelphia Electric is building a \$27-million powerplant at Phoenixville; Carpenter Steel plans a \$3-million rolling mill at Reading; Individual Drinking Cup Corp. is building a \$1-million factory at Easton.

In New Jersey, the Navy is building a \$22-million air-turbine lab at Trenton, and Roller Bearing Co. of America will spend \$14-million on expansion there. Du Pont will build a \$25-million chemical plant at Gibbstown and a big new tetrachthyl-lead plant at Deepwater Point. Kieckhefer Container will employ 200 at its new Camden plant.

In Delaware, Chrysler's tank arsenal at Newark will hire 4,000. Strawbridge & Clothier, with 500 employees, will be the biggest of 48 tenants in Wilmington's new Merchandise Mart. And Ralston Purina is building a \$1-million feed mill at Delmar.

Prospects are good, by and large, for the region's farmers. Demand is strong and prices are high for southern Jersey's truck crops and southeastern Pennsylvania's fruits. Pennsylvania winter wheat is in good shape. Delaware poultry areas should continue to do well. New Jersey potato farmers are the major weak spot.



THIS heavy-goods area is really roaring now. It took it quite a while after Korea to get going, but since November business, employment, and

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creasing efficiency in 65  
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It used to be necessary for laundry bookkeepers to make a ledger listing of 7 or more different items for each bundle of wash. The customer's name, address, laundry mark, total charges, etc., all had to be copied from the laundry ticket, which was prepared when the bundle was received at the plant. A lengthy, tedious—and costly—job of duplication when you consider that a fair-size laundry handles two thousand or more bundles of wash per week.

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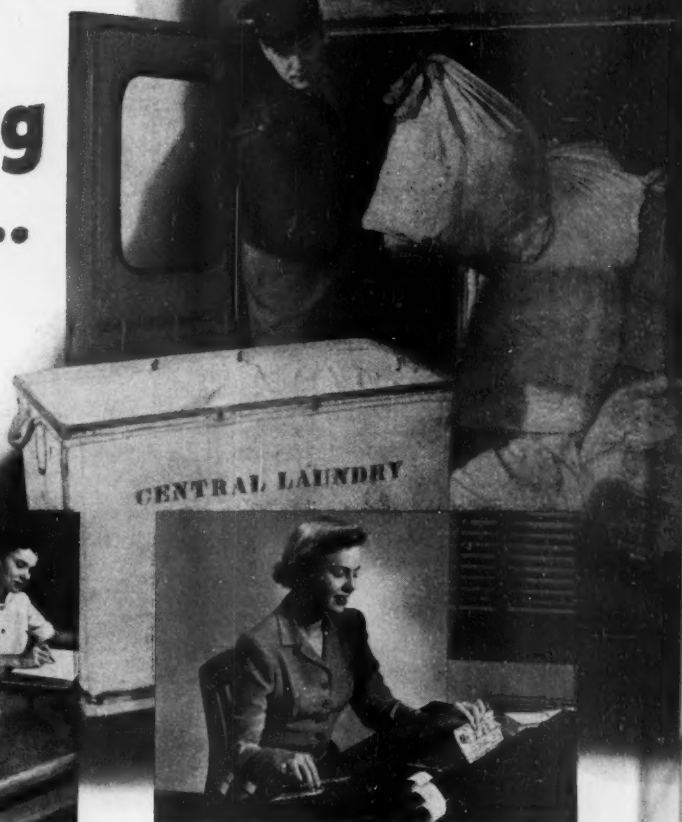
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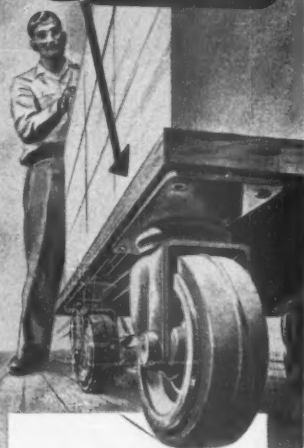
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THE COLSON CORPORATION  
ELYRIA, OHIO

income have been moving steadily ahead. Even though many big manufacturers have not yet received defense orders in volume, conversion layoffs have not been nearly so high as expected. Appliance manufacturers, for instance, though they are down a bit from the record level reached last summer, are still turning out a lot of merchandise and expect to continue—barring all-out war.

It's the little fellow who's hurt worst, of course. When Case Institute of Technology held a defense-order conference last month, 1,000 small-business men attended to get some hints on how to go about getting subcontracts for the war program.

Best-situated industries currently are the steel mills, machinery manufacturers, auto-parts makers, and metal fabricators. Ohio's machine-tool builders are happy over the pool orders authorized last week; it means they'll get priorities now on the majority of their production.

The region's extensive coal-mining areas received a big lift in purchasing power when the \$1.60-a-day raise for coal miners went into effect.

Dayton is one of the strongest spots in the district. The Air Force base is increasing employment 7,000 over the Feb. 1 level. And several of the city's big industries are also expanding. Frigidaire will need 2,500 workers at its new plant at Moraine City, a Dayton suburb, to work on a big propeller contract for the Air Force. Chrysler's Airtemp Division plans a \$1.6-million plant expansion that will require an additional 3,000 to 4,000 workers. Standard-Thompson Corp., aircraft-parts maker, is building a \$1.6-million plant at nearby Vandalia.

Columbus is another strong spot. Reactivation of Lockbourne Air Force Base will eventually bring close to 8,000 officers, enlisted men, and civilian workers to the city. North American Aviation will add 3,000 workers within the next three months. Clark Grave Vault Co. is adding 300 men to work on a \$12-million order for aircraft landing mats. Battelle Institute plans a \$1-million expansion that will require 250 more employees. And Shoe Corp. of America is building a \$1-million plant.

Cincinnati, too, is doing well. GE's jet engine plant at suburban Lockland now employs some 2,000; that will be expanded to at least 10,000. Ford is putting up a new building to make aircraft-engine lubricating pumps, will hire 1,000. Bendix has bought Ford's old plant at nearby Hamilton; will employ 2,000 to make aircraft parts and accessories. At Pittsburgh, total payrolls are at a new all-time high.

Just about the only weak spot in the region is Akron, where the rubber industry started heavy layoffs the end of

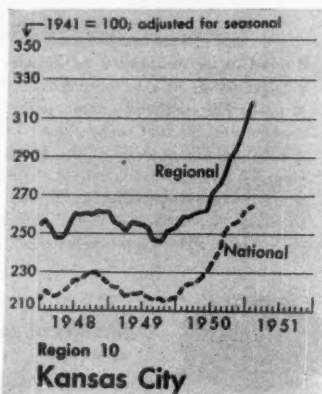
last month because of restrictions on use of rubber for civilian products. As many as 10,000 of the city's 60,000 rubber workers may be out of work by the end of this month.

Among the other new plants in Ohio: Goodrich is building a \$24-million rubber-products plant at Akron; Thompson Products plans a \$13-million expansion at Cleveland; Bendix-Westinghouse Automotive Air Brake is spending \$2-million on expansion at Elyria; Detroit Steel plans a \$50-million mill at Portsmouth; Reliance Electric is building a \$14-million plant at Euclid.

In Pennsylvania, Pittsburgh Steel is spending more than \$50-million on expansion at Monessen; Crucible Steel \$26-million at Midland. Allegheny Ludlum is building a \$54-million rolling mill at Brackenridge. Sharon Tube plans a new \$3-million plant at Sharon; Aetna-Standard a \$2-million plant at Ellwood City. St. Joseph Lead is spending \$2-million on expansion at Joseph-town. And at East Pittsburgh, Westinghouse will employ 1,500 at its new generator plant.

In West Virginia, Signode Steel Strapping plans a new 125-man plant at Weirton, and Sylvania is opening a new fluorescent-lamp plant in Wheeling. Berea Rubber Co. is building a 130-man rubber molding plant at Berea, Ky.

The outlook for farm income in the region is good. Winter wheat acreage is higher; snow cover was satisfactory; so a big crop is in prospect. Tobacco income should be at least as high as last year's, weather permitting. In the beef area around Lexington, Ky., cattle numbers are up sharply.

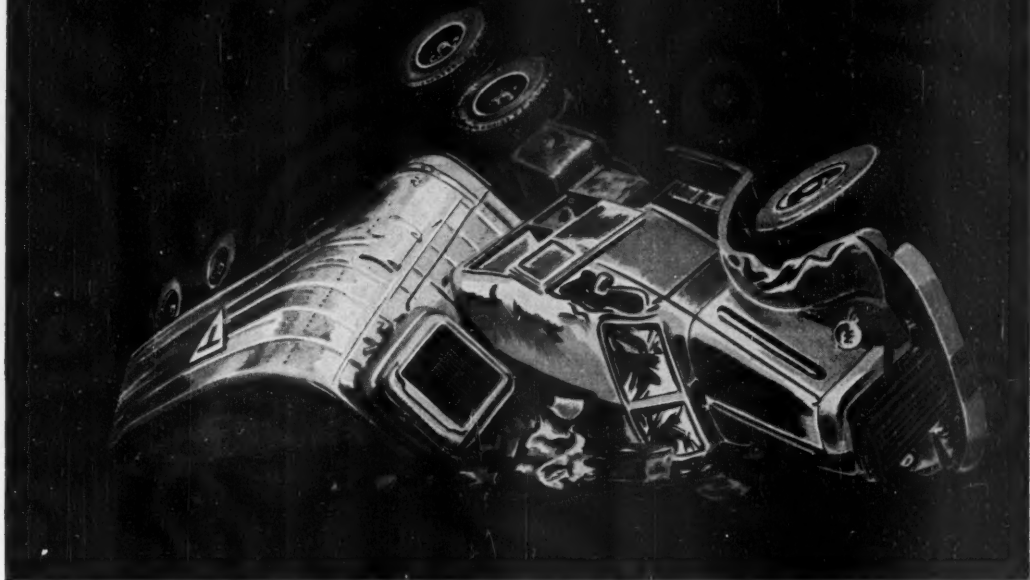


**E**VERYTHING goes right on booming here; the region shows the largest income gain in the country, both over a year ago and over last June (just before Korea).

Traditionally, this is farm country. Actually, it's getting more and more



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TO RAISE: Place foot on circular rung; release control lever and lift seat to desired height.

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That's the consensus of opinion among employers and employees, alike: Cosco "Finger-Lift" Office Chair is a *better* seat—a *bigger* value! Foam rubber-padded, revolving "saddle" seat raises or lowers—quickly, easily and *positively*—to any height between 16" and 20" . . . backrest adjusts three ways. Durable, washable, vinyl plastic upholstery on seat and backrest in green, brown, maroon or gray; all-metal frame finished in gray or brown baked-on enamel. Life-time lubricated, hard rubber casters, with ball bearing swivels. Ask for demonstration without obligation at leading office equipment dealers. Or write for name of nearest dealer; COSCO, Dept. BW-124, Columbus, Indiana.

Illustrated: Model 16-C, with gray, baked-on enamel finish. Also Model 16-D, with brown, baked-on enamel finish. Retail price about \$29.95 (slightly higher in Florida, Texas and Western states).

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Posture Back  
adjusts 3 ways



In and out for  
depth of seat . . .



Up and down for  
height of backrest



Tilts freely to  
"follow" the back.

industrialized. And sharply higher industrial activity is as important as increased farm income in the over-all income picture.

Wichita was one of the first cities in the country to feel the effect of large defense orders. Employment there today is close to double year-ago levels.

Unemployment practically doesn't exist in any of the region's big cities. Manufacturers are getting new workers either by tapping city dwellers not ordinarily in the work force or by attracting men from the region's farms. This is giving rise to real fears of a farm-labor shortage come summer.

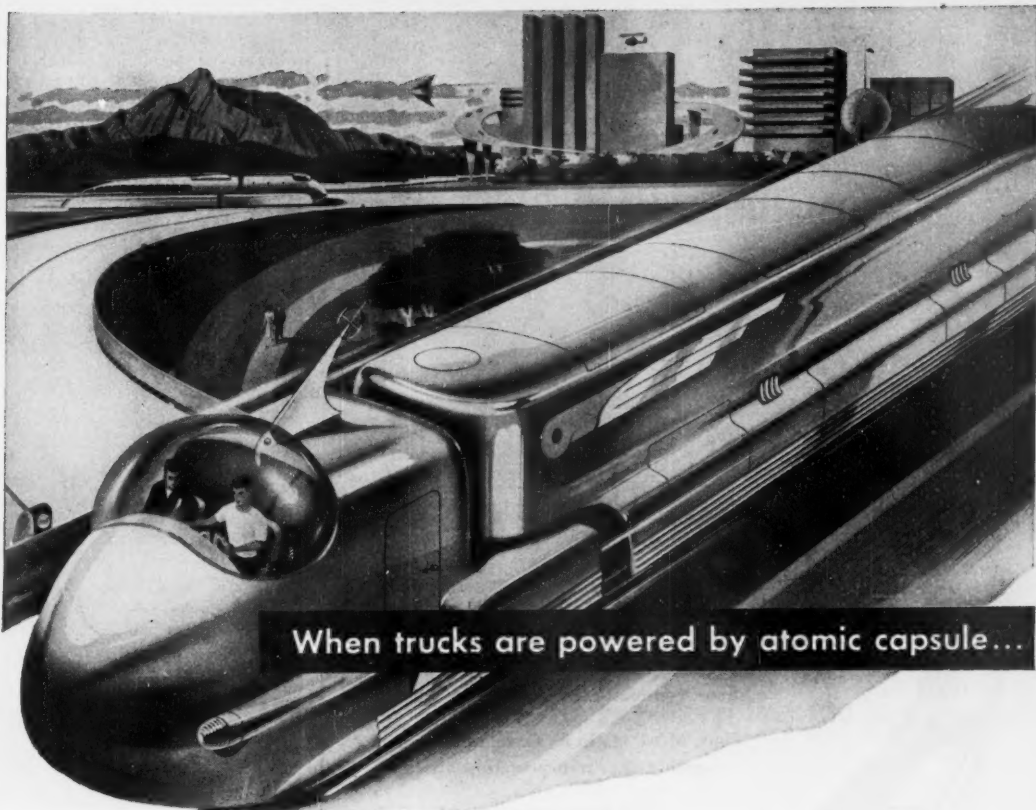
In Kansas and Missouri, military construction alone will amount to more than \$100-million. Three ordnance works are being reactivated: Sunflower Ordnance Works; Lake City Ordnance plant; and the Kansas Ordnance Works, at Parsons. Work is under way on the B-47 jet-bomber training base at Wichita; cost was originally set at \$374-million, but there are rumors that it's already been upped to \$70-million. In Colorado, there's a big expansion program at Rocky Mountain Arsenal, near Denver, and the Air Force is spending \$5-million at Buckley Field nearby. In Oklahoma, Tinker Air Force base, at Oklahoma City, has 17,500 on the payroll, and expansion at the McAlester Naval Ordnance Works has pushed employment past 2,000.

Industry in the region is expanding, too. At Kansas City, Procter & Gamble and Colgate are each building a \$1-million plant; Benson Mfg. Co. is spending \$2-million on expansion. At Lawrence, Food Machinery is building a new chemical plant. And Standard of Indiana is putting up a \$24-million refinery at Neodesha.

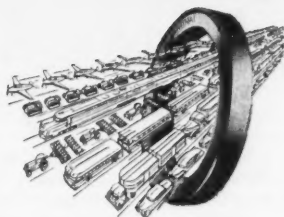
In Oklahoma, Douglas has opened the Tulsa bomber plant and will employ 20,000. Standard Cable expects to boost its work force to 700 at Chickasha. Skelly Oil plans a \$2-million expansion of its gas refinery at Velma, and National Gypsum is building a \$4-million paper plant at Pryor. The spot to watch for future industrial expansion in Oklahoma is the northeastern corner, around the Grand River Dam. Several big firms are now dickering for land in that area.

U. S. Cold Storage Corp. plans to build a \$14-million plant at Omaha, Neb. And Pacific Fruit Express is going to build a \$1-million ice plant at Laramie, Wyo.

Income is strong in all the region's mining areas. AEC's announcement that it will boost bonuses for uranium finds, and will accept ores down to as little as 0.1% uranium content, will result in a big increase in exploration activity on the Colorado Plateau. The government's promise to share 50-50 in the development costs of promising



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Rockets zooming from planet to planet! Trucks powered by atomic capsules! Automobiles "cruising" at 200 m.p.h.!

This fantastic future may be closer than we think. And when it comes, imagine the unheard-of efficiency and endurance that will be required of oil seals and every other part in these high-speed machines!

You can be sure that National Oil Seal engineers will not be caught napping. Already they are researching and testing oil seals to match the imagination and daring of the most forward-thinking designers.

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*Original equipment for all cars, trucks, busses,  
tractors—in fact, wherever shafts turn!*

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other railroad  
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Every diesel-powered train—passenger and freight—on the MISSOURI PACIFIC System will, by this summer, be equipped with train radio. Engineers on hundreds of trains will be in direct communication with each other.

Thus, MO-PAC, in its Centennial Year, again makes transportation history.

... So passengers and shippers who specify "MO-PAC", the Modern Progressive Railroad, can count on even faster, more dependable transportation.

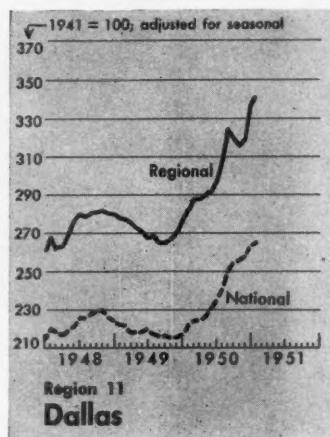
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SERVING THE WEST-SOUTHWEST EMPIRE

nonferrous properties is another shot in the arm to the mining country.

Farm prospects are still uncertain. Last-minute rains in the dustbowl section saved the winter wheat crop from complete ruin, but the yield will be substandard. Livestock had a good winter; the herds are larger than a year ago, and in good shape. Range owners in the Flint Hills and Osage Hills country of eastern Kansas and Oklahoma will have a good year; they're getting high rentals for grazing land from Texas cattlemen who have been plagued at home by dry weather and lack of feed.



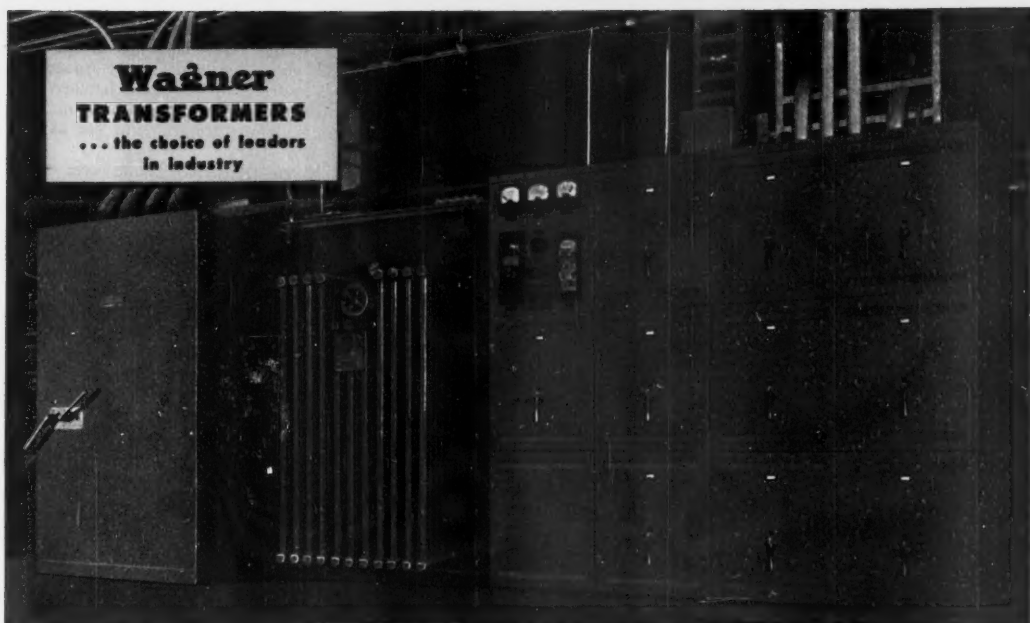
**B**USINESS and industrial activity—and income—have been rising steadily ever since the end of October. The influence of the defense program on the region's economy is becoming steadily more important. Nevertheless, the high level of civilian demand has been by far the major factor in the over-all rise so far.

Nonfarm employment is rising again, after a drop in January. But even that drop (about 1%) was much less than is normal at that season; a continued rise in factory jobs, particularly the aircraft industry, partially offset the drop in trade and service employment. Another factor that helped hold down the decline was increased civilian employment at military installations.

By and large, the outlook is for a continued rise in income in the district's urban areas, which should more than offset continued poor income in most farm areas, particularly the Texas Panhandle and along the Rio Grande.

In the Panhandle, drought has been very bad for the second straight year. Much of the winter wheat is in such poor condition that some farmers may decide to plow it under and replant to cotton or sorghums in the hope of salvaging some income for the year. Early March rains offered a last-minute





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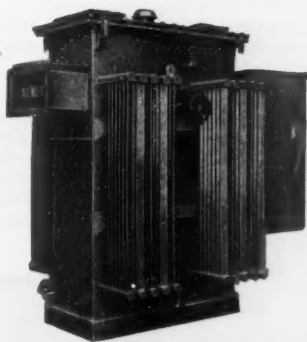
ated at high voltage and is stepped down to utilization voltage by Wagner Unit Substation Transformers, like the one pictured above—in one of fourteen Wagner-equipped unit substations in this plant.

Wagner Transformers are an important part of the equipment of many great industrial plants. In every case they are adding to their reputation for complete dependability . . . for unfailing service . . . that influenced American Enka to install Wagner Transformers.

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All very true—words and pictures can't tell you. The secret is in a special Live-Action back—tension relaxes as you lean—and in a special Tilt-Action seat—front edge rises just slightly, back part drops almost two inches, feet remain on floor. These

features banish seating fatigue and step up work efficiency.

**Art Metal Aluminum Posture Chairs** are made in models to suit your needs—all with exclusive fine points that bring new comfort, distinction, serviceability. Write for copy of pamphlet "Correct Sitting Posture"... Art Metal Construction Co., Jamestown, N. Y.

For over 60 years the hall-mark of fine business equipment...desks  
• files • office chairs  
• safes and visible equipment.



reprieve, but a lot more is needed.

Winter vegetable crops in the Rio Grande valley were almost ruined by successive cold waves in January and early February; temperatures in this normally semitropical area got as low as 18F.

Citrus growers in the area were also hit hard. Fortunately, about half the grapefruit and three-fourths of the oranges had been picked before the freeze. The rest was frozen on the trees. Worst of all, the last freeze hit the trees themselves. They had started to bloom, and the buds were killed; that means next year's crop will be small.

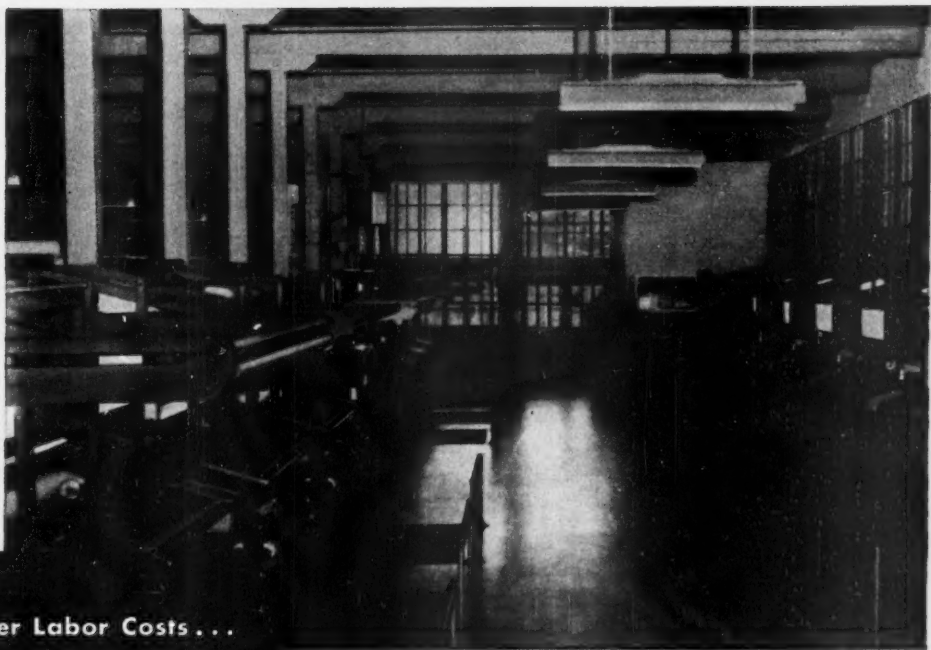
Cattle are in fair to poor shape because of the cold, the drought, and the lack of wheat grazing. Shrinkage was heavy, but actual death losses were light, so numbers are comparatively large. But ranges throughout the state are in poor condition.

Bright spots in the otherwise dark farm picture are southeastern Arizona, where crops are in good shape, and beef-rice-vegetable area of eastern Texas and Louisiana, which had plenty of rain all winter.

Prospects for the important petroleum industry are very good. It's estimated that 1-billion bbl. of crude will be produced in Texas alone this year, compared with 829-million in 1950 and 743-million in 1949. That will mean a \$500-million increase in income from petroleum this year over last.

Expansions and new-plant activity have been very heavy in recent months. The Atomic Energy Commission is building a plant near Amarillo (it won't tell the purpose or the cost); 1,000 will be employed when it's finished. At Beaumont, Texas Gulf is building a \$43-million sulphur plant. Reynolds' Metals is building an \$80-million aluminum plant at Corpus Christi. Lone Star Steel is spending \$75-million on expansion at Daingerfield. Ford will spend \$43-million to double the capacity of its Dallas assembly plant. Dow is spending \$10-million on expansion at Freeport and Velasco. Expansions at Houston include: Sheffield Steel, \$126-million; Sinclair, \$25-million; Cameron Iron Works, \$5-million. At Longview, Southwest Metals will spend \$4-million to expand its electric furnace steel capacity. Taylor Refining is spending \$2.6-million on expansion at McAllen, and du Pont \$43-million at Orange. Westinghouse is building a new \$24-million plant at Paris. And at Port Arthur, Gulf is building a \$6-million ethylene plant, and Koppers plans a \$64-million chemical plant.

Outside of Texas, Hughes Aircraft is building a 1,500-man plant at Tucson, Ariz., said to be for guided missiles. And Skelly Oil is spending \$14-million on expansion at Eunice, N. M.



Lower Labor Costs . . .

Better Production . . .

Improved Morale . . .

## Pittsburgh COLOR DYNAMICS

benefits workers and management  
alike in Dover Mill Company Plant

**W**HETHER you manufacture durable products or soft goods your plant will benefit in many ways by using Pittsburgh COLOR DYNAMICS.

Actual experience in many industries with this new painting system, which is based upon the *energy in color*, proves that proper "color engineering" improves quality and quantity of output, cost of production and well-being and safety of workers.

● **These advantages** are once more demonstrated in the plant of the Dover Mill Company, of Shelby, N. C., manufacturer of quality figured and plain dress goods made of cotton and synthetic fibers.

What COLOR DYNAMICS has accomplished for management and employees alike is best summarized by J. R. Dover, President of this company.

● **"A few months ago,"** writes Mr. Dover, "we painted the interior of our cloth inspection room, using a COLOR DYNAMICS plan specified by Pittsburgh. The results in greater efficiency have proved extremely gratifying.

"In an operation such as inspection of textiles, the element of eye-fatigue among operators is a serious one. In 'color engineering' this room according to COLOR DYNAMICS, a color arrangement was used that would reduce outside glare and at the same time provide eye-rest areas for the purpose of lessening eye strain and the nervous tension to which it often leads.

● **"We also found** that the color scheme aided materially to improve housekeeping. This is important in a room which must be kept extremely clean for the handling of goods prior to shipment. An added benefit, although more difficult to measure, is the marked improvement in morale among our employees.

"Distinct demarkation of hazard areas, such as elevators, storage racks and heavy rollers, with *safety colors* has also decreased danger of accidents.

"As far as our experience is concerned, we have found the results of COLOR DYNAMICS entirely satisfactory."

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Your plant may be made more efficient and a better place in which to work with COLOR DYNAMICS. For a complete explanation of what this system is, send for our free, profusely-illustrated booklet. Better still, let us explain exactly how to apply it in your plant. We'll gladly submit a scientific color engineering study free and without obligation.

There's a trained COLOR DYNAMICS expert at each of our warehouses located in all principal cities. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our representatives see you at your convenience. Or send this coupon.

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Pittsburgh Plate Glass Co., Paint Div., Department BW-31, Pittsburgh 22, Pa.

☐ Please send me a FREE copy of your Booklet "Color Dynamics in Industry."

☐ Please have your representative call for a Color Dynamics Survey of our properties without obligation on our part.



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# PITTSBURGH PAINTS

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PITTSBURGH PLATE GLASS COMPANY

# How they stopped broadcasting Jam by the "POUND"

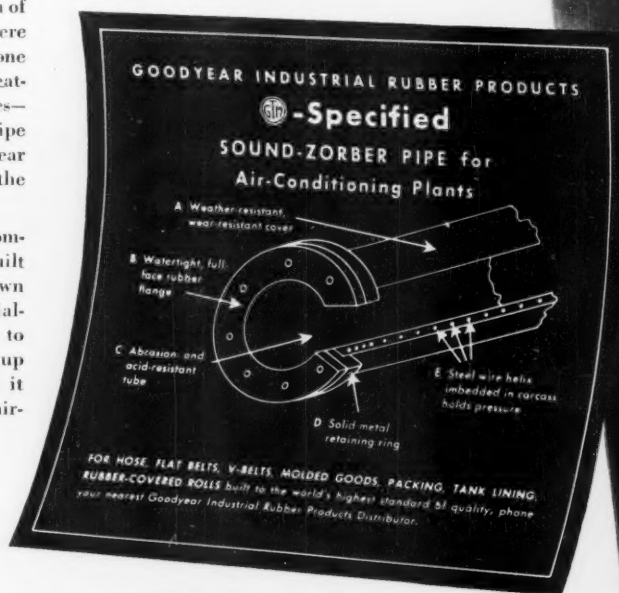
Radio men hate "jam"—extraneous sounds that creep into broadcasts and interfere with reception by the listeners. In the case of a leading studio, engineers were plagued by a persistent pounding that was being picked up by super-sensitive microphones. By a process of elimination, they finally tracked this distracting hammer to its source.

It was a hammer in the pipes carrying the cooling water from the air-conditioning plant in a room near the broadcasting studio. Misalignment, uneven expansion and contraction of the pipe line, and frequent surges of water were setting up a water hammer, just like the one that may have occurred in your own home heating system. After trying all sorts of remedies—even using flexible copper tubing in the pipe line—the studio turned to the G.T.M.—Goodyear Technical Man—to see if rubber could be the answer.

To cushion the hammer, the G.T.M. recommended installing a length of Goodyear-built rubber pipe in the offending water line. Known as "Sound-Zorber," this short length of special-built rubber pipe proved to be the answer to the problem. It absorbs water pulses, takes up the uneven contractions of the pipe. And it handles the high pressures needed in the air-

conditioning plants of multi-story buildings like the one in which the studio is located.

**Commercial buildings**, apartment developments, theatres and many other buildings are comfortable and quiet thanks to this new development of the G.T.M.—proof that it pays to consult him first if rubber can solve your problem. From absorbing vibration to peeling shrimp, the G.T.M. may well show you how rubber can do it better. You can consult him by writing Goodyear, Akron 16, Ohio.



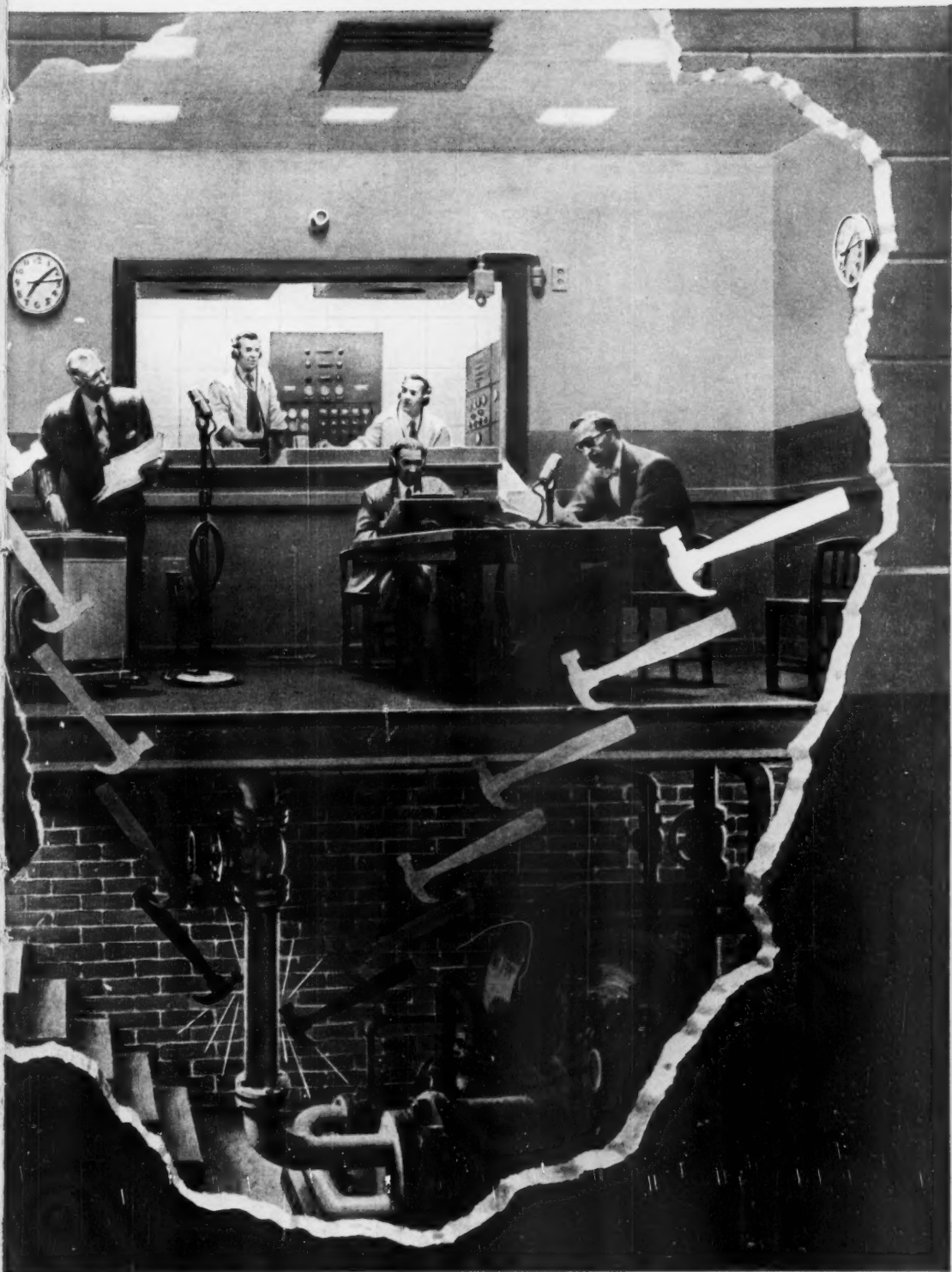
We think you'll like  
"THE GREATEST STORY EVER TOLD"  
Every Sunday—ABC Network

# GOOD YEAR

THE GREATEST NAME IN RUBBER

Sound-Zorber—T. M., T. R. Finn & Company, Inc., New York City







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And with all that decorative versatility you get these extremely important material advantages.

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*Maximum economy.* Low material cost . . . fast, economical installation . . . and, long service life combine to give you astonishingly low cost-per-square-foot-per-year. Add the trim attractive appearance of Tile-Text Asphalt Tile, and the result is maximum flooring value at minimum cost.

Plan on Tile-Text for *your* flooring needs. Comprehensive literature and specifications are yours for the asking. Just write: THE TILE-TEXT DIVISION, The Flintkote Company, Dept. HA, 1234 McKinley Street, Chicago Heights, Illinois.

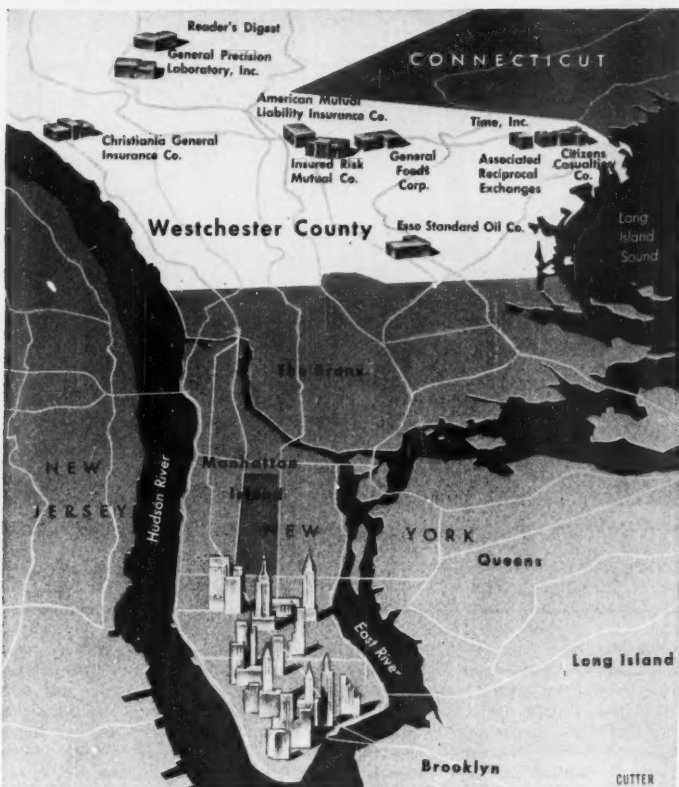
### Tile-Text

ASPHALT

**FLOORS AND WALLS**

\*REGISTERED TRADEMARK, THE FLINTKOTE COMPANY

# MANAGEMENT



MIGRATION of downtown New York businesses to Westchester speeds up as . . .

## Offices Move to Suburbs

Rents are cheaper, there's room to expand, labor is near, and it's a nicer place to work. Those are reasons why businesses are heading for the hills—of Westchester County, for instance.

North of Manhattan, suburban Westchester County is bringing into sharp focus a new twist in business decentralization—garden-type office buildings.

• **Migration**—It's the latest trend in Suburbia, U.S.A. More and more companies are moving all or part of their white-collar workers out where there is plenty of room to expand. Desertion of central office districts has become common enough to worry downtown office building owners in many parts of the country.

A couple of months ago Time, Inc., and General Foods—two big companies headquartered in New York's jungle of skyscrapers—purchased large hunks of Westchester real estate. They plan to

build garden-type office buildings to house major portions of their headquarters' staff.

Time has set no date for its migration, but General Foods says it will wait at least two years before it makes its move.

• **More Space**—Both give the same reason for moving out country: lack of space to expand where they want to in Manhattan. General Foods leases offices in the Postum Building on Park Ave., but has had to move some of its staff into other buildings. Time occupies the Time-Life Building at 9 Rockefeller Plaza. It has already signed up for two more floors there. But president Roy Larsen told employees:

## MATERIALS HANDLING BRIEFS



Dock time on barges is expensive . . . so power plant unloads them quickly with Wellman Coal Tower. Bucket scoops up 600 tons of coal an hour, feeds it into hopper. Then conveyor carries it to stockpile. Speed of dependable Wellman equipment cuts handling costs to minimum.



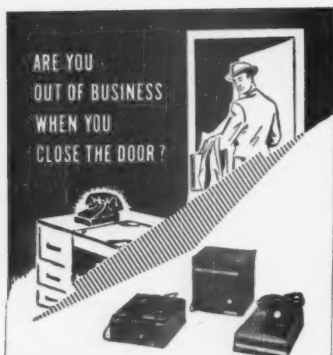
4½ ton load accelerates from a dead stop to full speed in just 12 seconds when lifted by this Wellman Mine Hoist. Full load zips up the mine shaft at 1500 feet per minute. Wellman hoists move materials quickly, boost productivity.



Big bites of iron ore don't loosen the jaws of this Wellman Williams-type bucket. Welding of buckets was pioneered by Wellman to make them rugged and durable. Whether the need is for machinery to handle heavy bulk materials, or specialized steel mill equipment, Wellman will build it . . . better. The Wellman Engineering Company, 7000 Central Avenue, Cleveland 4, Ohio.

**Wellman will build it!**

**WELLMAN**  
ENGINEERING COMPANY-CLEVELAND



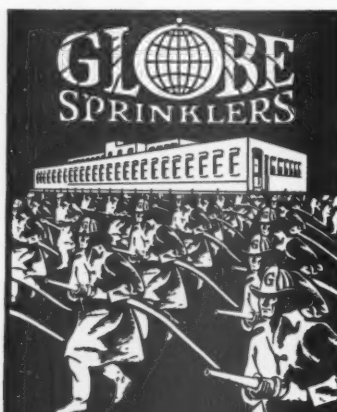
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**THEY PAY FOR THEMSELVES**



**NEW HOME** for Associated Reciprocal Exchanges is on 20-acre plot at Port Chester, N. Y.

"When all of these two floors are in use, we are fairly certain we will not be able to get any more major space here."

• **Swelling the Stream**—Many companies in New York besides these two are interested in getting out of town. Some have already made the jump, a good many of them from the crowded insurance district of lower Manhattan. American Mutual Liability Insurance Co. of Boston has moved its New York City branch office to White Plains; Associated Reciprocal Exchanges, another insurance company, now has its headquarters at Port Chester; Improved Risk Mutuals is at nearby White Plains. Besides these, a small company, Christiana General Insurance Co., is committed to move to Tarrytown (also in Westchester County).

Insurance companies aren't the only ones with itching feet. Esso Standard Oil Co. is building two-story offices at Pelham, N. Y., to house its New York state sales division. Citizens Utilities Co. leased space at Greenwich, Conn., a couple of years ago. Now it plans to put up a one-story building near the Time site.

To this list you can add at least a dozen or more companies that are scouting around Westchester's woods for a likely spot to build. Among them is a big downtown insurance company. Its architects are already in the field.

• **Pioneer**—Years ago Reader's Digest proved you could run a huge operation far off the beaten path. It was born and grew up in the Pleasantville area of Westchester County.

Now other companies just as big are studying the Reader's Digest operation to see how a business organization functions out in the woods.

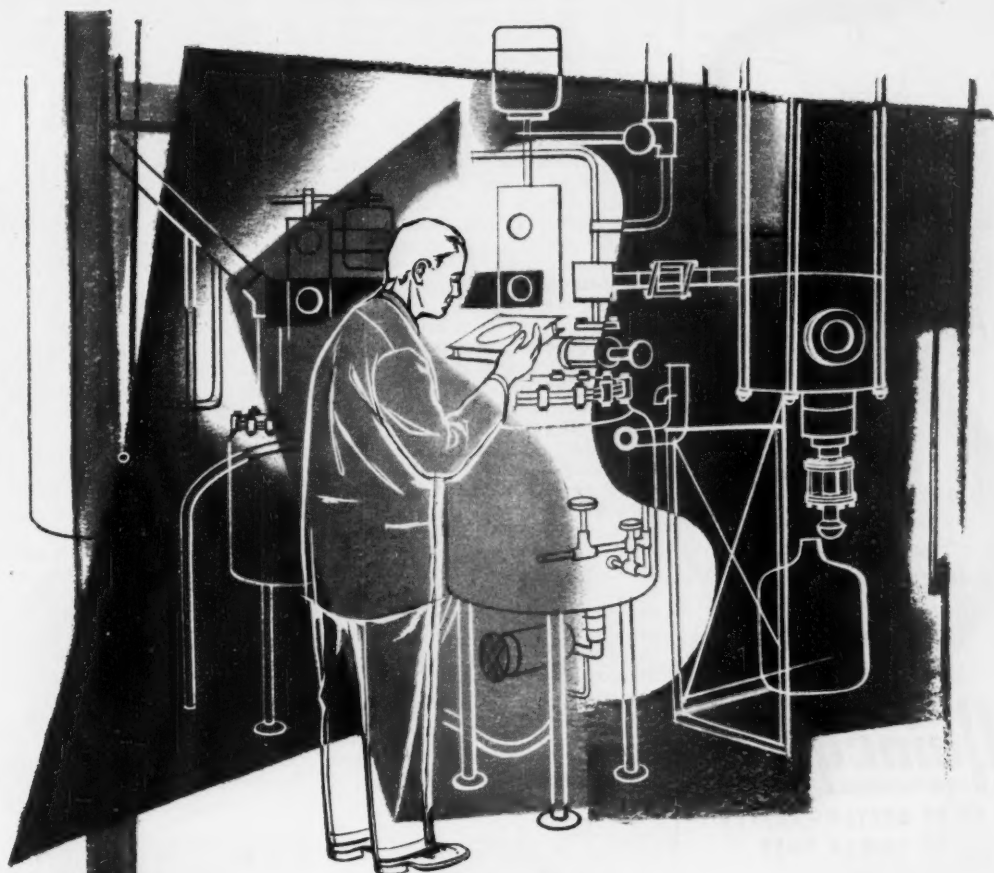
• **Why Move?**—In almost every case you run across these reasons for moving to the outskirts: (1) There's just not enough downtown space in the right places, and it doesn't look like there will be; (2) rents and real estate prices in good locations look prohibitive, especially to smaller companies; (3) the commutation problem is getting worse; (4) it's getting harder to hire first-class personnel to work in some of the more unsightly, congested New York areas; (5) management thinks workers will be happier looking at trees instead of grimy buildings and listening to birds instead of honking taxis.

For business, Westchester's big attractions are its nearness to New York, plenty of open country, and an unusually large number of people who commute to work outside the county. It should be easy for companies to lure them away from downtown offices into jobs nearer their homes.

Natives of Westchester are happy about the whole thing. If the trend continues, it will help solve a threatening problem that most of the county's towns now face. Large estates that used to pay the big tax bills are being split up into smaller residential sections. Residential areas don't pay their own way unless average valuations run high.

The answer is business property. But Westchester doesn't want a lot of little business districts or factories. Office buildings look like a heaven-sent an-





## CHEMICAL PLANT

# Gets a Laboratory Check-up



**TENNESSEE**  
**PRODUCTS & CHEMICAL**

*Corporation*

NASHVILLE, TENNESSEE

PRODUCERS OF FUELS • METALLURGICAL  
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We have a way to cure production ills before they can become headaches. Above you see a pilot plant, operated to produce chemicals just as a great big, full-scale plant will later yield production runs in much greater volume. The model helps us put the finger on errors, eliminate the cause before it can become a problem in normal production.

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Practical research is an extra value in everything you buy from Tennessee... make no mistake, it's our aim to bring you extra value every time. It's good business to do business with Tennessee... an industry producing for all industry.



## From Car Finishing —to Ditch Digging



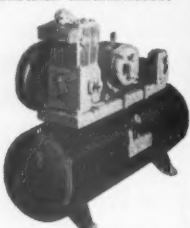
**Quincy**  
COMPRESSORS

### DO IT BETTER—FASTER AT LOWER COST

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swer. They carry a big share of the tax load, but don't clutter up the countryside. To make sure they don't, Westchester sets minimum acreage, will allow buildings to cover only a minor part of it.

• **Other Pastures**—Westchester isn't the only suburban New York area that's getting office buildings. Long Island has been for a long time. An early settler is Garden City Publishing Co. More recently, Liberty Mutual Insurance Co. moved part of its operations to Lynbrook. Across the Hudson River from Manhattan, New Jersey suburbs are being used, too. This year Chubb & Sons, a big marine insurance group, will move its factory operation—the processing of policies and premiums—to Millburn, N. J., where construction on a new plant has already started.

• **Some Warnings**—The Urban Land Institute of Washington, D. C., calls this business exodus "a challenge the central city must meet." And the magazine *Buildings*, published in Cedar Rapids, Iowa, not long ago put out a special brochure called "Gullible's Travels." It paints a gloomy picture for companies with wanderlust, warning executives to shy away from the suburbs. A lot of workers will have longer trips to work, the brochure warns. Sales contacts will be lost; you'll probably need to issue maps so people can find your office; hotel accommodations most likely will be poor; the president will find it harder to attend important business meetings held downtown.

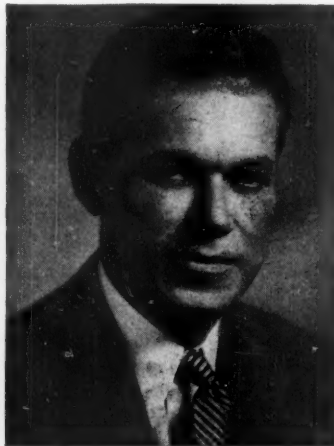
There are other problems, too. Feeding has to be at least partly subsidized, most likely in a company-run cafeteria—traditionally a money-loser. Upkeep is another headache that management buys when it takes over its own building. There's a way around that. You can form another company to operate the building, lease it back to yourself.

In addition, if a building is located away from a railroad station, a company probably will have to provide partly subsidized transportation. Charges by a private bus operator have to be high to start a new route just to one out-of-the-way spot.

• **Outweighed**—Lumped together, these disadvantages make a good argument for some companies to stay put. But in lots of cases the advantages of cheaper space, room for growth, and top-grade workers available will outweigh the drawbacks. That's especially true for companies that don't have to worry about close contact with buyers and sellers and have few purchasing problems.

• **Case in Point**—It applies, for instance, to a company like Associated Reciprocal Exchanges, a fire and casualty insurance group. Most of its staff are women (about 200) doing stenographic and clerical work. It has practically no salesmen. Last December it moved lock, stock, and president to a new three-story brick building it built at Port Chester, N. Y.

A couple of years ago Associated Reciprocal found it didn't have enough



## Johns-Manville's New Top Command

Leslie M. Cassidy (right) is Johns-Manville Corp.'s new chairman of the board; Adrain R. Fisher (left), its new president. For both men it was the second promotion in a month. They got their latest boost Mar. 2, after 57-year-old Lewis H. Brown, who had

held the chairmanship since 1929, died suddenly in Florida. On Jan. 31, Cassidy had been elected president to fill a vacancy left by the retirement of R. W. Lea. At the same time, Fisher became vice-president in charge of asbestos mining.

An illustration of a large industrial crane lifting a GATX tank car. The tank car is suspended by cables and is positioned over a map of the United States. A train of similar tank cars is shown traveling across the map. The crane's lattice structure is prominent on the left side of the image.

# GATX GEOGRAPHY

You see GATX tank cars everywhere—hundreds of specialized kinds—carrying chemicals, petroleum products, edible oils, fish oils, molasses and innumerable other bulk liquids to and from every state in the Union.

Yet none of the more than 42,000 tank cars in the GATX fleet is ever more than a few hours away from one of General American's completely equipped maintenance shops. Thus General American—builder, operator, lessor of tank cars—keeps the nation's bulk liquids rolling swiftly, safely and economically to their destinations.



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Are you on the verge of a startling profit discovery?

If you make cooking utensils—steel, copper, aluminum, iron or enamel—your search for metal-saving shortcuts is bound to lead you to glass covers. Then *you'll* discover this selling truth that McKee discovered a long time ago: Glass covers sell cooking utensils faster than any other kind.

McKee supplies hundreds of thousands of strong, heat-resistant covers to leading manufacturers of metal cooking utensils.

For a great many years, McKee has been an outstanding source of quality-controlled industrial and commercial glass. Many manufacturers assemble McKee glass into their own finished products—we supply appliance window panels, urn liners, television mirror blanks, mixing bowls, among countless other items. McKee precision goes into many glass machinery parts, too.

Whatever your glass requirement, we put almost a hundred years of glassmaking know-how at your service. Call on us to make glass to your established design . . . help you design new items . . . develop glass to meet your specific needs.



**COOKING WARE COVERS.** Supplied to top metal cooking ware manufacturers. Made of McKee Glasbake brand boro-silicate glass—strong, heat-resistant.

## McKEE GLASS COMPANY

McKEE PARK, JEANNETTE, PENNSYLVANIA  
Established 1853

Makers of the World's Most Complete Line of Glass Cooking Ware

room in its Manhattan offices. It needed at least 25,000 sq. ft. more. It also wanted to move into a swankier area because of a mounting employment problem. Top-notch stenographers and clerks were turning up their noses at the company because of its grubby location in New York.

If the move had been made inside the city, says president Ernest B. Brown, rent would have jumped to about \$4.50 per sq. ft. That's \$120,000 a year. Then, too, the expansion problem probably would have cropped up again in a few more years. Brown didn't want to tie his expanding company to long-term leases.

• **Settled**—So Associated Reciprocal began looking around Westchester County. It finally bought 20 acres between Port Chester and White Plains, put up a building with 37,000 sq. ft., and left only a two-man office in New York City.

"It's working fine," says Brown. He estimates that the company will have lost only 15% of its staff due to the move. About 15% already lived in the area, 25% moved there, 25% plan to commute from the city, a few are still looking for places to live.

• **Money Saver**—In dollars and cents the company believes it will wind up ahead. That's despite skyrocketing building costs that threw original estimates way off. It also takes into account maintenance, cafeteria expenses, and a few dollars a week to help pay workers' bus fares from the Port Chester railroad station.

Hotel accommodations are no serious problem. Visitors either commute from New York or are put up in rooms at the Westchester County Country Club—which is glad to have the extra business in off seasons.

• **Adjustment**—There is one problem that came up early: Women missed being able to go around the corner for a noon-day shopping tour. "They get over it," Brown says. He adds: "We figure we were smart, especially since Time-Life will move next door. That ought to make our address, Port Chester, N. Y., pretty impressive."

## Companies Sponsor Free Symphonies

Music-minded Indianapolis businessmen have just finished this year's series of annual company-sponsored concerts for their employees and friends.

Ever since World War II, four or five companies in the city have paid for "industrial concerts" by the Indianapolis Symphony Orchestra. It's charged off to goodwill.

• **War-Born**—The idea was an outgrowth of tight transportation during



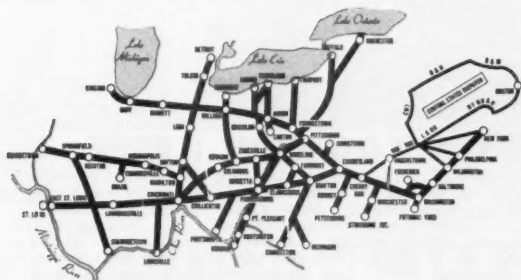


## Why wear a blindfold, Mr. Shipper ?

Why not enjoy the benefits of B&O's *Automatic Records*—an important feature of Sentinel Service. As if removing a blindfold, we inform you and the receiver, through *Automatic Records*, what has happened if the schedule of your car is interrupted;

and, again, when it has been reforwarded.

Supplementing the siding-to-siding dependability of Sentinel Service, *Automatic Records* offer shippers (both on and off line) another reason for routing their carloads via B&O's Sentinel Service. *Ask our man!*



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## Add EXTRA SNAP to your letters with ATLANTIC BOND

Try Atlantic Bond — the paper with extra crispness, crackle and snap — when you want to put life into your letters. It's business-like, clean in appearance, genuinely water-marked — the way to get better looking letters faster, easier. The best way, too, of ensuring better readership of your message.

Ask for it in White, Cream or any of twelve attractive colors. You'll be pleased with the quality — and the price.

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## LET US SHOW YOU HOW...FREE

Do you know... today's efficient American Machines will materially reduce time, labor and costs in floor maintenance! Ample power for scrubbing, polishing, disc sanding, steel wooling. Also—proper sealing and finishing with American Floor Materials will reduce maintenance and cleaning costs on any floor—terrazzo, asphalt, rubber, concrete or wood. Your nearby American distributor will be glad to call and talk over your floor service problems, without obligation. Write... The American Floor Surfacing Machine Co., 551 S. St. Clair St., Toledo 3, Ohio.

*48 Years of Leadership*

## AMERICAN FLOOR MACHINES

the war, which prohibited nonessential tours. With an annual budget of \$190,000, the Indianapolis Symphony needed a new source of revenue. It sold seven of the city's industries on buying concerts for their workers. After the war, the practice continued.

• **Five Donors**—This year five companies footed the bill for four concerts, the last on Mar. 1. They were P. R. Mallory Co., electronic manufacturer; Van Camp Hardware & Iron Co., wholesaler; Gibson Co., appliance distributor; L. S. Ayres & Co., department store; and Kingan & Co., a large independent meat packer.

Each company contributed between \$1,690 and \$2,000 this year, depending on its size. Most of the companies handed out Annie Oaklies; a couple charged a nominal 35¢ "to get better support from the employees."

## MANAGEMENT BRIEFS

**Jet-propelled training** at North American Aviation, Inc., is turning groundling engineers into aeronautical engineers at 70 a clip. Like Lockheed Aircraft Corp., it has started a school, but to keep up with the heavy demand North American limits each class to three weeks, instead of Lockheed's six.

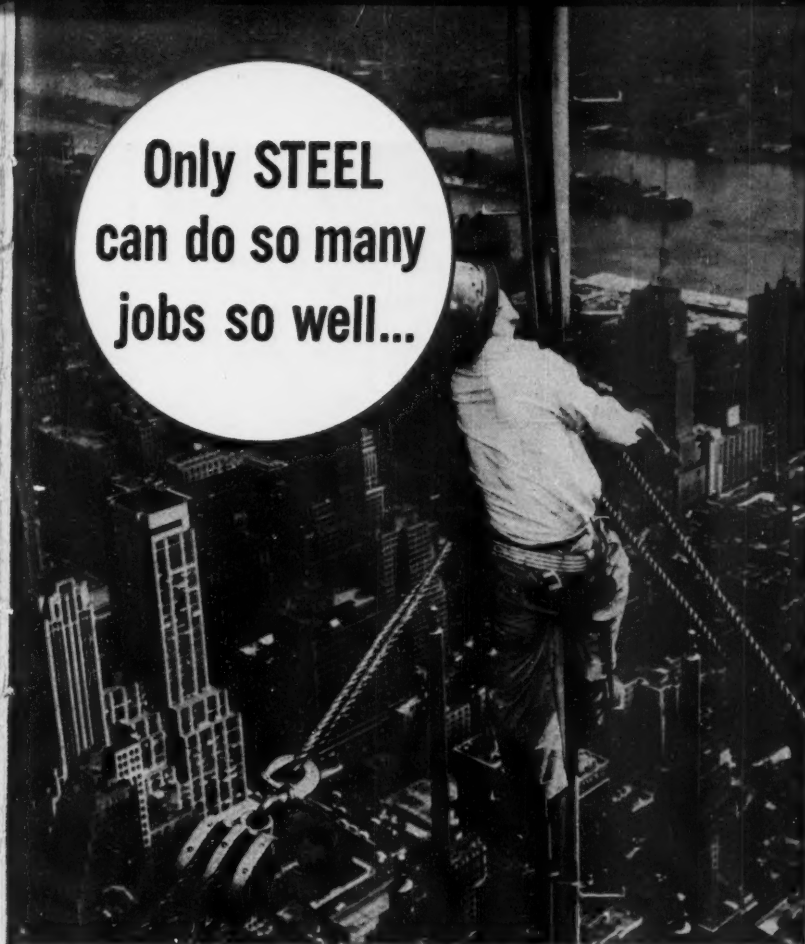
**To sell free enterprise** Joseph E. Seagram & Sons, Inc., has set up a \$1-million Samuel Bronfman Foundation for a research and training program at Columbia University. The idea: Get facts about the U.S. economic system, then teach them. It's in honor of the company's president.

**Long-range planning:** Armco Steel Corp. has named R. S. Gauer as special aide to president W. W. Sebald to advise him on long-range planning. The job was created because of the company's big expansion program.

**To protect business records**, two New York organizations (Commercial Archives, Inc., and Business Archives Center, Inc.) have rented warehouses outside big city "target" areas where they'll store your valuable papers. You have access to the records anytime. Business is reported booming.

**Guided bus tours** on company time helped Leeds & Northrup Co., Philadelphia manufacturer of furnaces and controls, get 300 of its 2,000 employees used to the idea of moving. Starting this week, the company will shift part of its operation across town. Meantime, every worker has seen the four new plants, knows where he'll be located.

Only STEEL  
can do so many  
jobs so well...



**HIGHEST TV ANTENNA.** 1250 feet above the sidewalks of New York, a new 222-foot television tower was recently constructed atop the 102-story Empire State Building. For this highest structural steel ever erected by man, all steel parts had to be specially designed so they could be taken up *through* the building—and carried by hand the last few stories. The tough steel, the precise fabrication of it, and the nerveless men who erected it, were all supplied by United States Steel.



**REFLECTING SURFACE.** You never can tell these days where you'll run into Stainless Steel. In the ultramodern Wm. Alexander house in Encino, California, it's used as a reflecting surface beside the fireplace. Mobilization will call for lots of Stainless Steel. And United States Steel will contribute plenty of U-S-S Stainless to help build America's security.



**TIGHT AS A DRUM** and made to take a beating. For in these strong, tough, leak-proof steel drums, made by U.S. Steel, everything from soft drink syrup to aviation gasoline is safely shipped and stored . . . all over the world.



**TANK BUSTER.** Mobilizing her strength for the defense of freedom shows how true it is that America has a backbone of steel. Huge quantities of steel must go into weapons like this "tank buster." But because U.S. Steel is large, has constantly increased its steel-making capacity, it can supply steel for the needs of mobilization, as well as for essential every day uses.

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to quality steel . . .

#### FACTS YOU SHOULD KNOW ABOUT STEEL

In the past 50 years, the population of America has doubled. But the American steel industry has increased its production *sevenfold*.



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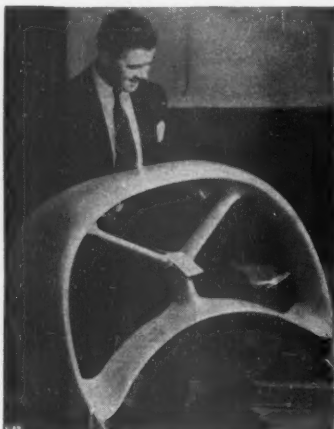
# PRODUCTION



**BOAT** Engineer Col. K. J. Kramsie looks over one of the many plastic boats being developed for the military.



**RUDDER** Air Force technician peruses some of the laminated parts for military planes.



**AIR SCOOP** Navy uses this plastic intake fairing, and other complicated moldings.



**CASE** Typewriter case (left) and pack-board were developed for the Quartermaster Corps.



**SLED** Tough and cold-resistant, this plastic Army sled will be used in the Arctic.

## Beefed-Up Plastics Move in on Metals

To the layman's ear, laminated reinforced plastics may sound like another way of spelling ersatz.

But to the product engineer and designer, reinforced plastics are a coring material, with an enormous potential application in military equipment—from ship's hulls to typewriter cases, to shoe shanks. And these special plastics shape up as no mere substitute for iron or steel. It looks now as though these plastics would be able to qualify entirely in their own right under the

triple test of cost, strength, and weight.

• **Barriers**—The reinforced plastics industry is very young and very small—a mere fraction of the over-all plastics group. Before the wide vistas of "maybe" expansion, the reinforced plastics makers are like a hungry pup outside a butcher shop window. There are wonderful things inside, but how to get through the door?

It's a double door for the plastics makers. To start with, there is a shortage of materials, styrene above all,

fibrous glass for reinforcing, catalysts. On top of that, there is a general lack of engineering data. Not enough is known about what the plastics can do, and how they should be handled. The military can't go ahead with the big orders it thinks are practicable, because it isn't sure.

• **Fibrous Glass**—Reinforced plastics are just what their name says they are. You take an ordinary polyester resin and introduce a reinforcing material, usually fibrous glass, sometimes sisal,





## "HOW'S THIS FOR SIZE, POP?"

"WELL, Skip, I'd say that helmet is about right. It'll give you plenty of protection when you take your 'rocket ship' up for a spin!"

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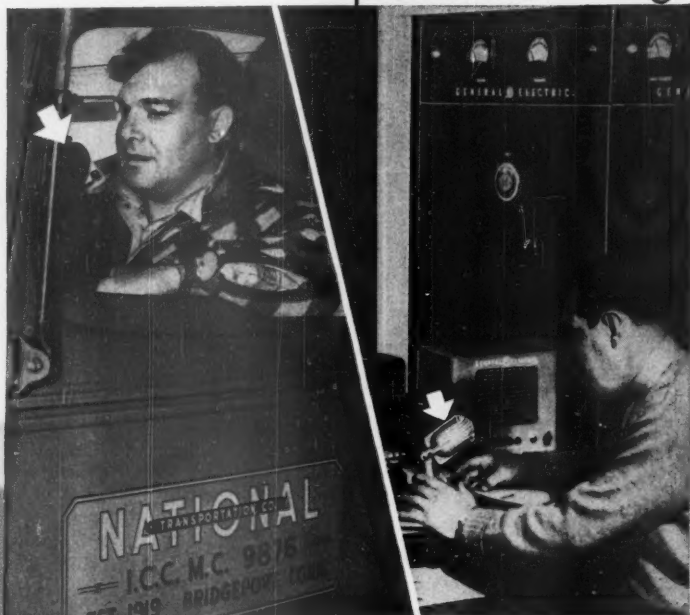
# Hardware Mutuals

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HARDWARE MUTUAL CASUALTY COMPANY • HARDWARE DEALERS MUTUAL FIRE INSURANCE COMPANY

# Mobile Radio Keeps Trucks Rolling-



## 2-Way Radio

Dispatcher knows instantly when a trailer is empty, talks via radio to driver in cab (above). Radio control of vehicles on the move 40 miles away simplifies scheduling, cuts backtracking and overtime.

## Boosts Volume 20%

To make every mile count, the National Transportation Company equips its cargo trucks with General Electric 2-way radio. Dispatcher and drivers talk instantly with each other when trucks are on the move. Rolling pay loads between Connecticut and New Jersey, these semi-trailers now make more pick-ups with less waste mileage because radio clears the way for quick loading and unloading. Breakdowns are repaired faster with maintenance crews dispatched by radio. Efficiency and pay loads

have increased—over-all volume is up 20%.

Your business, too, can profit by such a radio system if you need tight control over wide area operations. May we talk it over? The coupon below will get action.

### MANY INDUSTRIES use G-E mobile radio.

Examples: Steel Mills • Mining • Ranch and Farm Operations • Lumber and Logging • Heavy Construction • Taxi, Bus and Trucking Fleets • Petroleum and natural gas—drilling, pipelining, distribution.

### HOW MUCH IS *Instant Communication* WORTH TO YOUR BUSINESS?

#### CIVIL DEFENSE

Your community has a communication network for use in emergencies. You can tie into this net at little cost. For details, ask the G-E Electronics Department office near you.



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Please send me FREE INFORMATION KIT on  
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GENERAL  ELECTRIC

paper, cotton, hemp, or rayon. This gives the material great strength, especially in the direction of flexibility. Resistance to great heat is a big problem; the glass can take it, but the resin can't. The industry hopes to beat this with more resistant polyester resins and melamines that can take heat.

In general, the reinforced plastics serve best as casings or coverings, but in an extremely wide field. The more optimistic engineers see a future for them in pipes and landing mats, shelter tents, guided missile casings, and hundreds of other uses, where strength and lightness are vital.

• **Structural Uses**—Both the advantages and difficulties of reinforced plastics got a thorough airing in Chicago early this month when over 600 experts attended the annual session of the Reinforced Plastics Division of the Society of the Plastics Industry. The accent was on the structural uses of the material (BW—Jan. 14 '50, p63). Here are some of the proposed uses of the materials, along with their still-unsolved problems.

• **Pipes**—Both the Navy and the Army Engineers are interested in plastic pipe. Their goal is a pipe of 6-in. diameter, weighing no more than 3 lb. per ft. Thus 20-ft. lengths would run from 40 lb. to 60 lb.—less than a tenth the weight of iron or steel pipe. Corrosion resistance is another advantage. But so far, none of the pipes has shown enough heat resistance to satisfy the fire-conscious Navy. There's another catch, too; the stuff leaks under pressure. Technically, the plastics develop porosity when exposed to water or high humidity because the glass fiber and the resin aren't wedged tightly enough. L. L. Yager, of Bjorksten Research Laboratories, told the SPI conference that a vinyl chloro silane might provide a more effective bond.

• **Ship Hulls and Boats**—The Navy would like to use plastic hulls for the 57-ft. minesweepers now being built of wood. Both Navy and Army are interested in plastic boats. But in the larger craft, a huge amount of research is still to be done.

• **Radomes**—This is where reinforced plastics came in; radomes of the material were used successfully in World War II. Now this field is expanding to include shelters for navigational beam senders. The plastic is transparent to radar and radio beams, and, although the new shelter is a little more expensive than its wood-and-masonry predecessor, it needs less maintenance.

• **Guided Missiles**—Radar transparency of plastics has obvious advantages for remote control weapons, but the services aren't talking about this.

• **Flak Armor**—Corrugated laminated plastics have high impact resistance. Used in World War II for flak vests, they may now be used to protect plane

floors, instrument housings, and self-sealing gasoline tanks. Pound for pound, they beat steel for resisting fragments.

• **Landing Mats**—The Army Engineers are seeking—vainly up to now—a laminated plastic landing mat to fit this bill: 3 lb. per sq. ft. weight, 80,000-lb. wheel load, with 240 psi. tire pressure. So far the top wheel load achieved is 20,000 lb., and the mats disintegrate under the terrific heat of jet exhausts. But heat resistance is being pushed ever upward by the chemists.

• **Prefab Housing**—In this field, plastics offer lighter weight, weather resistance, and indefinite storage possibilities without deterioration. They're good insulators against heat and cold. Plastics have been used to replace sash and glass in quonset huts.

• **Trunk Lockers**—The Army has developed a locker weighing 15 lb. less than the old model, and eliminating over 600 metal parts. In cases for standard typewriters, weight has been cut in half from the old wood-and-metal type.

• **Shoe Shanks**—The Army would like to replace its two-piece steel-and-fiberboard shoe shank with a one-piece plastic job in combat boots. It wants a material that resists moisture, corrosion, and mildew. Lack of data is holding up adoption of the plastic until rigorous torture tests have been completed.

This list barely opens the chapter of potential uses. Others may arise from the fact that plastics grow stronger under extreme cold, where metal would turn brittle. Its thermal insulating qualities may open still other doors.

• **The Dark Side**—For a material with such a beguiling future, reinforced plastics have more than their share of trouble in the present. One of their biggest obstacles is the lack of engineering knowledge.

Suppose the military calls for a new item; it might be made of steel, it might be made of plastic. On steel, the book has already been written, engineers know pretty much how it will react to the stresses the new product will face. And they know exactly how to go about using the steel to make it.

With reinforced plastics, it's very different. You may be convinced, in theory, that plastic can beat steel on every count. But you don't know it for sure. And you have only the dimmest idea how to handle the plastic in the design and production of a brand-new product, with brand-new problems.

To get the answers, you need a lot of experiment and testing. But in an emergency you don't have unlimited time for research. The need for speed may tilt the scales in favor of using metals now.

• **Triple Shortages**—Shortages of materials provide a triple barrier for plastics



## Keeps weather from sidetracking a trolley

Bad weather was causing a maintenance crisis in the Street Railway Department of a large city. Not because roads were blocked or power lines were down, but because trolley fenders were rotting away! Rain, slush, and salt used for de-icing the streets caused the trolley's steel mudguards to corrode—cut their life span to only three months. And the cost of replacement was averaging \$35 a day.

Then a rubber company came up with a solution that resulted in savings of \$10,000 a year. They developed a fender made with Du Pont neoprene. Neoprene was chosen because of its outstanding ability to withstand weathering and aging. And designers felt that neoprene's superior resistance to deterioration

from oil, grease and most chemicals would make it ideal for such service.

The neoprene fenders lived up to expectations. After a year of continuous use they required no servicing or replacement, except when mechanical damage occurred. And motormen reported an added bonus—neoprene's resilience provided quieter operation. Now you'll find neoprene fenders on every one of the 106 new trolleys the city recently ordered.

For more information about neoprene, write for our booklet "Design for Success with Neoprene." It describes neoprene's properties and many of its important uses.

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... THROUGH CHEMISTRY

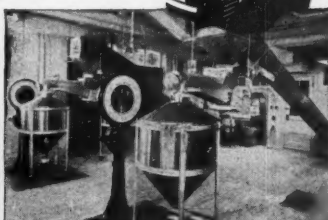
# Control Costs with TOLEDO!



ON YOUR SCALE  
MATERIALS  
BECOME  
MONEY



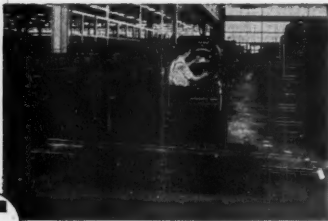
**PACKAGE CHECKING.** Shipments automatically checked and weights printed.



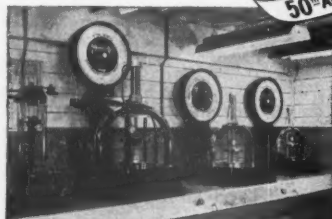
**BATCHING.** Toledos save time and safeguard quality... make batching quick and sure.



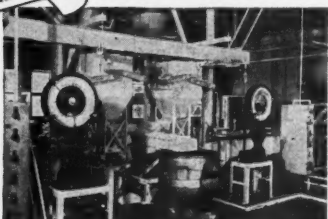
**COUNTING.** These Toledo Scales count small parts rapidly and accurately.



**PRINTWEIGH SCALES** stop errors... print big figures — accurate weights—with split-second speed.



**FORCE-MEASURING.** These Toledos used for compression testing of a wide variety of coil springs.



**AUTOMATIC CUT-OFF.** Groups of scales can be electrically interlocked for completely automatic batch control.

After you've fought the battle of high costs, "criticals" and shortages to obtain materials—don't waste them through careless handling! Tighten your control at every step! See that you have up-to-date scales—and enough scales—throughout your materials handling operations. See if you could use Printweigh to stop losses through human errors. Whatever your problems in weighing, checking, testing, counting, batching or force-measuring... there's a modern Toledo to do a better job. Send for latest weight control bulletin 2020X. Toledo Scale Company, Toledo 1, Ohio.



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Toledo Printweigh Scales provide printed weight records... assure you that the accurate indication of the Toledo dial will reach your accounting records without chance of human error.

## TOLEDO

### HEADQUARTERS FOR SCALES

to surmount. Styrene, fibrous glass, and catalysts are all short now.

The highest hurdle is styrene; from a quarter to a third of a pound goes into every pound of polyester resin. To get styrene, the little reinforced plastics industry is competing with two giants, synthetic rubber and molded plastics.

• **Styrene Split**—The chemical industry turns out about 600-million lb. of styrene a year. Synthetic rubber skims 400-million lb. right off the top of this. That leaves 200-million lb. for all others. Molded plastics have been consuming at a rate of over 275-million lb. And reinforced plastics have brought up the rear with 3-million lb. This year reinforced thinks it could use from 8-million to 10-million lb., but it's wondering whether it will even be able to get the 3-million it had last year.

There are signs of hope for styrene. Benzene, the component that's most scarce, may perk up with increasing use of the petroleum-based products supplementing supplies of coke-based. At the same time, the large-scale tests are being made of rubber with a reduced styrene content. If they succeed, the styrene saving may be as much as 16%.

• **Reinforcement**—Fibrous glass is also scarce now, but Owens-Corning Fiberglass is adding a third big plant. The shortage in glass is in manufacturing equipment and not raw materials.

In addition to O-CF and Glass Fibers, Inc., companies not now in the picture are understood to be seriously considering going into the manufacture of fibrous glass.

There's enough loom capacity to produce glass cloth, but not enough annealing capacity to treat cloth that is woven. Present wait for heat-treating cloth is eight weeks. But relief is in sight. One of the major weavers is installing annealing equipment.

As for the catalysts, biggest shortage is hydrogen peroxide, high concentrations of which are needed in the ketone peroxides used in low-temperature fabricating techniques. Rocket and guided-missile fuels are competitors for available hydrogen peroxide.

• **The Squeeze**—All this puts the reinforced plastics industry in a vise. To meet hoped-for military demands, it would have to retain all its present skilled personnel. But reduction of civilian production threatens to force layoffs before the military orders come along.

The industry isn't robust enough to stand a lean in-between period. Of the 125 companies in the field, the oldest is only seven and a half years. The average age is only three. That's why the industry is begging to be allowed to maintain its civilian production, regardless of over-all material shortages, until increased engineering knowledge releases the flood of military orders.



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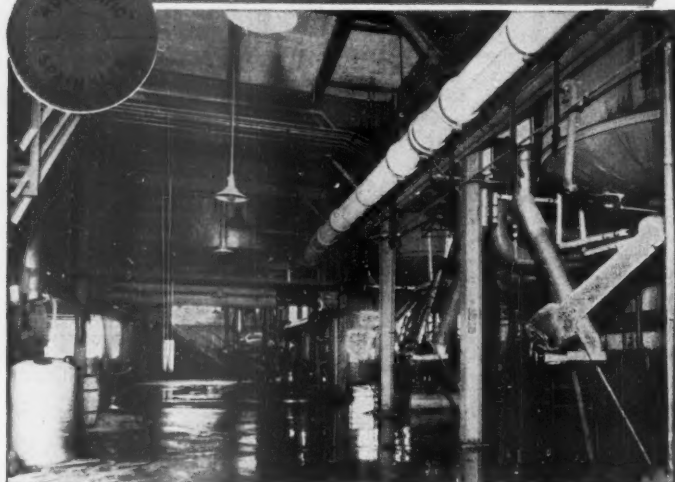
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## "Automatic" Sprinkler Protection is tailored to the Fire Protection requirements of these chemical plants



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Here listed are but a few of the top chemical processing businesses whose personnel, manufacturing operations and business continuity have been safeguarded from fire by *"Automatic" Sprinkler*:

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Delta Products Company	Procter & Gamble Company
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Glidden Company	Reilly Tar & Chemical Corp.
Goodyear Tire & Rubber Company	Rohm & Haas
Harshaw Chemical Company	Schenectady Varnish Company
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## PRODUCTION BRIEFS

**U.S. proved reserves** of liquid hydrocarbons—both crude oil and natural gas liquids—add up to 29.5-billion bbl., according to the latest estimates of the American Petroleum Institute and the American Gas Assn. That's a jump of 1.2-billion bbl. in a year—despite record production. Natural gas reserves at the end of 1950 were the highest ever, 185-trillion cu. ft., an increase of 5.2-trillion since 1949.

**Zirconium output** is being pushed by the Atomic Energy Commission to get more of the metal for nuclear reactors. AEC wants to supplement government-owned production, is supplying technical data—some of it classified—on zirconium processes to private industry. If you're interested, write to AEC's Division of Engineering, Washington 25.

**A pilot blast furnace** now under construction at the Bureau of Mines, Pittsburgh, will recover manganese from open-hearth slag (BW—Feb. 24 '51, p. 57). The bureau also plans a plant at Boulder City, Colo., for dressing low-grade domestic ores from nearby Arizona deposits.

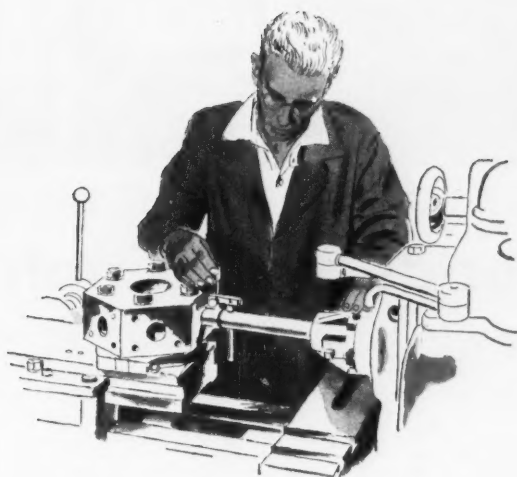
**Tire changer** for heavy trucks and aircraft is getting a tryout on Army and Air Force equipment. It separates a man-sized tire from a wheel rim in five minutes.

**Labeling of synthetic fabrics** was urged by Federal Trade Commission Chairman James M. Mead. Mead said legislation should provide "for determining proper nomenclature for the respective new fibers . . . and for nondeceptive informative labeling."

**A new Chevrolet division** was set up to handle military production only. Heading it is B. D. Marshall, up to now assistant manager of the Flint Mfg. Division.

**Knowhow on extruding** magnesium and aluminum will be pooled in a joint military-industry program sponsored by the Navy and Air Force. Its goal: standardization of extrusion dies and metals used in the manufacture of government aircraft.

**Lignin**, a waste product of paper making, can be combined with natural and synthetic rubbers to boost their strength, according to West Virginia Pulp & Paper Co. An equal amount of lignin added to an equal amount of natural rubber, for example, does the job.



*Our severest critics  
are right in our own plant!*

Contrasting with the constant pressure for production in other departments at Warner & Swasey is the calm, methodical work of one group of our men. These men are our severest critics—our final inspectors.

By the time an assembled turret lathe reaches one of these final inspectors, its individual parts have already passed 15,000 inspections!

*But that is not enough!* The final inspector carefully rechecks the completed machine—*proves* beyond doubt that it is ready to turn out the high precision work for which it is designed. Only then does he *sign his name* to a written report certifying that the turret lathe he passes is as perfect as human skill can make it.

Like our other departments, "final inspection" is working day and night to get machine tools to our shipping platform on schedule. But despite stepped-up production and urgent delivery dates, *no* machine leaves our plant until it meets the long-established Warner & Swasey standards for accuracy and dependability.



YOU CAN MACHINE IT BETTER, FASTER, FOR LESS WITH WARNER & SWASEY TURRET LATHES, AUTOMATICS AND TAPPING MACHINES



**1** "Parts are getting short," says a worker on Weatherhead's production line. The foreman reports the trouble to the radio man who roves the plant with his walkie-talkie.



**2** The radio man checks with central radio station, while the foreman waits for a reply.

## Plant Radio Speeds Stock Control

Weatherhead Co., a Cleveland manufacturer of fittings and equipment for liquid petroleum gas, is on the air, with a radio network inside its plant. It has one program—stock control—that runs for eight hours every day.

With 75,000 active blueprints, 2,000 key products, and almost a mile of production lines, Weatherhead needed a stock control system that would keep its parts coming on schedule. It chose in-plant radio and set up an installation that's probably the first of its kind.

• **"Calling Central"**—When a part supply gets low at a station along one of the production lines (pictures), a foreman passes the word to a roving employee who is equipped with a handie-

talkie radio set. The operator radios the part order to the plant's central radio station. There the order is checked on stock control charts, then relayed to another roving radio man in the department where the part is made. Finally, another foreman in the parts department picks up the radio order and assigns it to a parts maker.

Most orders handled by WRAP (for Weatherhead Radio-Audio Production) are routine. The production lines gobble up parts, which are replaced by orders for more manufactured ones, with WRAP handling the paper work in between. But sometimes a mistake pops up, as it did when *BUSINESS WEEK*'s camera took the picture story of

WRAP, and that's when the system pays off.

• **Inter-Com, Too**—Tied in with the radio network is a plant-wide communications hookup. This handles routine work such as progress reports. It also works as a party line for conferences when production problems pile up.

• **Speed**—WRAP not only smoothes out stock control but speeds it up. From start to finish, a routine order takes only about three hours to fill. Before WRAP, the same order would have taken from one day to a week to complete.

Weatherhead's \$15,000 installation has been working for over three months now. The company figures it has already paid for itself.



**4** Roving radio talker, plant manager, and parts foreman receive the query, look for the cause of the parts shortage.



**5** The foreman finds the trouble: He had misread the original order. He assigns another parts schedule to a machinist.





**3** At central station, the stock chart shows that the part supply should be in good shape. So the central operator radios a query to the department that makes the part.



**6** A factory truck, also directed by radio, delivers parts to the production line as soon as they come off the machine. Foreman acknowledges receipt to central station.

# LOOK

at your floors . . .



## Are they shabby?

Floors which receive heavy traffic become tread-worn and dirt-caked without warning, and then it is an expensive and difficult job to restore their original appearance.

Not only will a TORNADO Floor Machine solve this problem, but it will also eliminate its recurrence.

TORNADO Floor Machines provide sufficient brush pressure to:

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2. Increase the durability of protective coatings to prevent future penetrations of dirt and grime.

3. Create a clean, glistening floor you can be proud of.

Your floors can always look like new. Proper equipment is the answer.



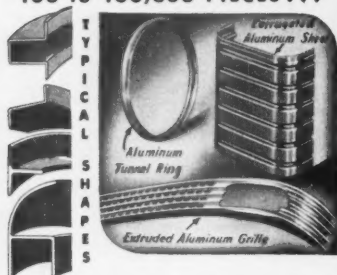
WRITE FOR BULLETIN 583

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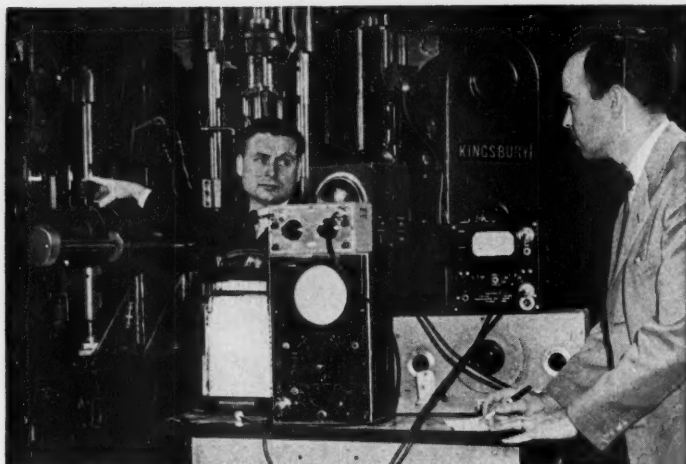


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ELECTRIC EYE WRAPPING MACHINES

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**HAYSSSEN MFG. COMPANY  
SHEBOYGAN, WISCONSIN**



**WHERE'S THE WIGGLE?** Ford Motor Co.'s engineers at Kingsbury hook vibration analyzers to machine tool. They'll iron out the bugs before Ford takes delivery.

## Machine Tools Get Pre-Delivery Check

Ford finds that to make the most of its research in machinability it needs tools that will stand up under high-speed operation.

Research in microstructure of metals (BW-Jan.13'51,p64) is making it possible to run machine tools faster and more efficiently than ever before. But that automatically puts demands on the tools that they have never had to meet before. In high-speed operation, it's all-important to prevent vibration and get real precision. Or else productivity will go down.

Ford Motor Co., one of the pioneers in the study of machinability, finds that it has to be extra finicky about the vibration and precision of its tools. To be sure that the machine tool is as near perfect as possible, it has worked out a new arrangement for checking some tools before it takes delivery.

• **Testing Methods**—Ordinarily, a machine-tool customer sends its experts to the tool builder's plant to run acceptance tests. While the first hundred or thousand parts are being turned out, the experts get rid of the bugs in a new machine before it goes to the buyer's plant.

But Ford has found that it has to go farther to get tools that will run at the speeds it wants. So, when it ordered a pair of machines for finishing pump castings from the Kingsbury Machine Corp., Ford engineers took vibration analyzers and other testing devices into the Kingsbury plant. Ford figured that the machines might have enough vibration to keep them from running at rated speeds, or cause off-size work.

• **Ford Was Right**—A few test runs on the machines proved Ford's hunch on

vibration. The analyzers showed a couple of weak points that could be cleared up to improve productivity. In one case a support bracket wasn't strong enough; its holding screws were too small. Vibration of the bracket would have affected the accuracy of the machine, resulting in excessive tool breakage and wear. So a heavier bracket replaced the weaker one.

In still another case, vibration developed when the cutting drill broke through a hole and hit a flash (or excess metal) in the casting. This time, though, Ford was at fault. Its foundry changed the design of the casting to eliminate the flash.

• **Other Dejects Spotted**—Besides looking for vibration troubles, Ford's engineers also got a chance to study the machines closely during the test runs. They watched for pileups of metal chips, often sources of production losses of 20% or more per operating hour. When the chips pile up, the operator must stop the machine to clear them away. Electrical control devices were added, too, so that the machine, not the operator, sets the pace. Additional guards were added to cut down the chances of injury to personnel. And tool life was lengthened between sharpenings.

Back in Detroit, Ford's machines run at 100% of rated capacity hour after hour without a wiggle. They machine three kinds of pumps on a two-shift basis compared to the older machines—12 of them—that run on a three-shift basis.



## Can you tell which of these men drive International Trucks?

*( Watch out - there's a catch to it! )*

### CLUES

Every International Truck is engineered with a truckload of features that make drivers happy:

1. **More room.** The Comfo-Vision Cab of every International Truck is the "roomiest cab on the road."
2. **Outdoor visibility.** The one-piece, curved Sweep-sight windshield gives full front visibility.
3. **Custom comfort.** Soft-cushioned, fully adjustable seats available in sizes and styles to suit driver preferences.
4. **"Floating suspension"** cab mounting. Every Comfo-Vision Cab floats on live rubber.

### ANSWER

What's that? You say that all the men are smiling... that all the men look happy? Well, that's because *all the men* drive International Trucks.

5. **Controlled ventilation.** A large cowl ventilator and ventilating windows permit drivers to regulate cab "climate" easily and conveniently.

6. **Easy handling.** An International Truck gives positive control from a more comfortable position... turns easily in the shortest practical circles.

7. **Valve-in-head power.** International engines offer more power for climbing hills, steep grades.

8. **Complete specialization.** The world's most complete line of trucks offers the right transmission, the right axle, the right units to match the job.

International Harvester Builds McCormick Farm Equipment and Farmall Tractors... Motor Trucks... Industrial Power... Refrigerators and Freezers



International Harvester Company • Chicago

See the new

# INTERNATIONAL TRUCKS

*Every model heavy-duty engineered to save you money*

**"WHO'D BE WILLING  
TO BOTHER WITH  
SUCH A SMALL  
STEEL ORDER?"**



**"U.S. STEEL SUPPLY!  
THEY'VE ALWAYS BEEN  
INTERESTED IN  
SMALL BUYERS  
AS WELL AS LARGE."**



*...your best source of supply...*

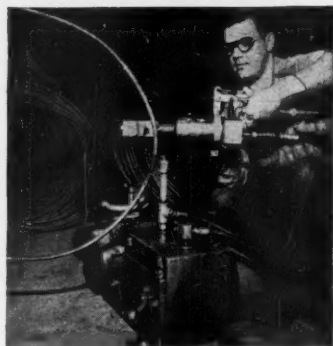
## UNITED STATES STEEL SUPPLY COMPANY



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Headquarters Offices: 208 S. La Salle St.—Chicago 4 Ill.

UNITED STATES STEEL

## NEW PRODUCTS



### 60,000 Lb. for Cutting

An hydraulic hand cutter called Guilotine 20E snips rods and bars measuring up to 1½ in. in diameter. The manufacturer, Manco Mfg. Co., says it also works well on heavy chain, bolts, wire rope, and cable.

A 25-ft. flexible hose connects the 38-lb. cutting head to an hydraulic pump. To operate, you turn on the pump, then close the hand valve on the cutting head. The blade makes a cut with a 60,000-lb. thrust. Release the hand valve, and the blade automatically retracts.

The pump unit is semiportable, can be dollymounted for complete mobility. Manco says the unit can be adapted for work as a punch, rivet, or press.

- Source: Manco Mfg. Co., Bradley, Ill.
- Price: \$1,500.

### Tachometer for Cars

Another auto accessory has hit the market. Stewart-Warner Corp. is making electric tachometers—they register engine rpm.'s—to install on cars, buses, or boats.

The tachometer consists of two units: a sending switch that's attached to the distributor, and the tachometer head containing a pointer and dial. You mount the tachometer head on the steering post or dashboard, connect it to the sending switch by a wire cable. The vehicle's electrical system supplies the current.

Stewart-Warner's tachometers are available in three models: the Standard Model, for 6v. systems, shows engine speeds up to 4,500 rpm.; the Recorder Model, for 6v. and 12v. systems, registers up to 1-billion rpm. before starting over; Vac-Tach Model, for 6v. systems, also has a built-in vacuum gauge that measures the manifold pressure of the engine.

- Source: Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14.
- Price: \$36.75 for Standard Model,



\$48.50 for Recorder Model, \$54.90 for Vac-Tach Model.

## Gear Unloader

Michigan Tool Co. has an automatic unloading device for rotary-gear shaving machines. The unloader fits onto gear finishers made by the company, but it can be adapted to other machine types, too.

A small wire-mesh belt that travels slowly over two drums picks up the completed pieces. As the belt moves, it allows the cutting fluids to drain back into the machine before discharging the gear into a collecting pan. Michigan Tool says the belt has a certain amount of give, prevents damage that may be caused when a piece strikes a standard metal chute or another gear. A low-horsepower electric motor drives the unit.

• Source: Michigan Tool Co., 7171 E. McNichols Rd., Detroit 12.

## Magnets Clean Cotton

Magnets can prevent fires and machinery damage in the production of such items as cotton flannels, Eriez Mfg. Co. says. The company builds a device to specification called Magnetic Hump Separator; it catches clips, nails, bolts, and other metal impurities in the cotton that might strike a spark during processing.

The unit consists of two Alnico magnets set in a hump-shaped sheet-metal housing. You install it between the bale-breaker and the entry to the cotton-processing machines. The hump shape of the unit causes the cotton passing through to tumble and mix. This gives the magnets a chance to drag out the tramp iron.

• Source: Eriez Mfg. Co., Erie, Pa.

## Electrified Paint Job

Paint sprays on by electrostatic attraction when you use an electronic unit called Paint-Miser with spraying systems. Ashdee Products, Inc., the manufacturer, claims its electronic accessory cuts overspray and paint waste, gives metal articles a more uniform surface.

While the item to be painted is in the spray booth, a conductor bar charges it positively. Then, as paint particles leave the spray gun, they pass between two negative electrodes, pick up a negative charge. Electrically attracted, about 95% of the paint spray lands on the work, Ashdee says. Paint reaches complicated cut-outs, goes around corners. That means fewer touch-up jobs by hand.

The power supply unit is housed in a portable metal cabinet that measures 1½ ft. x 1½ ft. x 4 ft. Ashdee says the

# Be Sure

your operating costs  
don't include any  
package manhandling expense



A likely place to look when you want to cut costs is in materials handling. About one-third of total cost is in this operation.

Would you like to know how Alvey Engineers have developed cost-saving results by replacing manhandling with modern conveyor methods?

Let us show you what we have done in industries having conveyor needs similar to your own.

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## What gives the razor blade its smooth face?

*...A brush!* Here's a double-edge idea to improve your cleaning and finishing operations:

Now, after hardening razor blade strip, progressive manufacturers are (1) removing heat-treat scale and (2) preparing the strip surface for name-etching . . . all in one speedy automatic brushing operation. The continuous, hardened strip passes through a finishing compound, then between two counter-rotating Osborn Monarch® Brushes, then between two Osborn Economy® Brushes. These two Osborn brushing stations do the work of 6 stations of the former method. The strip comes out uniformly clean . . . micro-smooth.

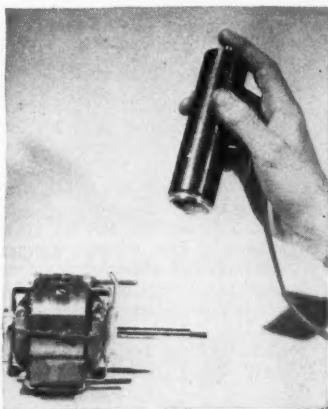
Can you "double up" like this on cleaning and finishing? Or can you use new Osborn brushes and techniques in other ways to speed your output and cut costs? An Osborn Brushing Analyst will gladly survey your plant and make suggestions. Call or write The Osborn Manufacturing Company, Dept. 440, 5401 Hamilton Avenue, Cleveland 14, Ohio.



LOOK FOR THE NAME OSBORN . . . RECOGNIZED EVERYWHERE FOR  
QUALITY WORKMANSHIP AND MATERIALS

Paint-Miser is easy to install and operate.

- Source: Ashdee Products, Inc., 18029 Dixie Highway, Homewood, Ill.
- Price: About \$8,750.



## Flashlight Stroboscope

Stroboscopes show how fast a machine part is moving by synchronizing a pulsing light with the speed of the part. They are usually bulky instruments. But Synchroscope Co. makes one that's not so big as a flashlight and is almost as easy to operate. It measures only 1 1/4 in. x 5 in., weighs less than 5 oz.

Synchroscope's instrument requires no warm-up. Switched on, its electronic tube instantly gives off the pulsing light. When this light, which is focused on the part, pulses at a frequency that matches the speed of the part, movement appears to stop. At this point, a dial on the stroboscope gives you the speed.

- Source: Synchroscope Co., 57 William St., New York City.
- Price: \$18.75.

## Portable Leak Detector

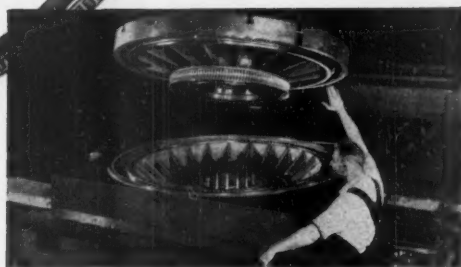
Distillation Products Industries, a division of Eastman Kodak Co., makes a compact, inexpensive leak detector for use in vacuum systems. Called Model LD-01, the device should appeal to those who have to use a leak detector only now and then.

To check a leak, you seal a glass tube of the detector into the system under test, then pump down the system to a moderate vacuum. Next you direct a jet of halogen-containing gas, such as Freon, against spots you think might be leaking. If the jet strikes a leak, the needle of an ion current meter set in the detector cabinet deflects suddenly.

- Source: Distillation Products Industries, Rochester, N. Y.
- Price: \$610.



Big 70.500" x 74.000" x 3.000"  
KAYDON bearings aid smooth operation of the huge Rockford Hy-Draulic Slotter shown below.

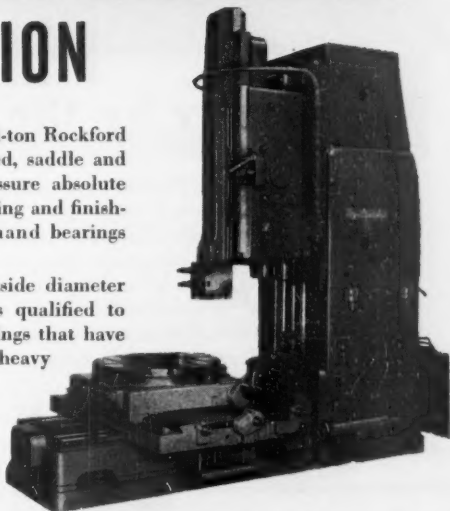


# Smooth OPERATION

Here was a challenge to precision bearings! Massive, multi-ton Rockford Hy-Draulic Slotters are high precision "all the way". Bed, saddle and slide of these precision machines are extra heavy, to assure absolute rigidity . . . the close tolerances maintained in the machining and finishing of all shafts, screws, gears and bearing surfaces demand bearings capable of heavy precision performance.

KAYDON met this challenge with big roller bearings (outside diameter exceeding 6 feet) . . . typical KAYDON precision bearings qualified to shoulder such responsibilities . . . the KAYDON kind of bearings that have helped many designers add greater productive utility to heavy stationary machinery and mobile equipment.

Whatever your bearing problem may be, contact KAYDON of Muskegon . . . you'll find all the facilities here for designing and producing bearings for specific duties.



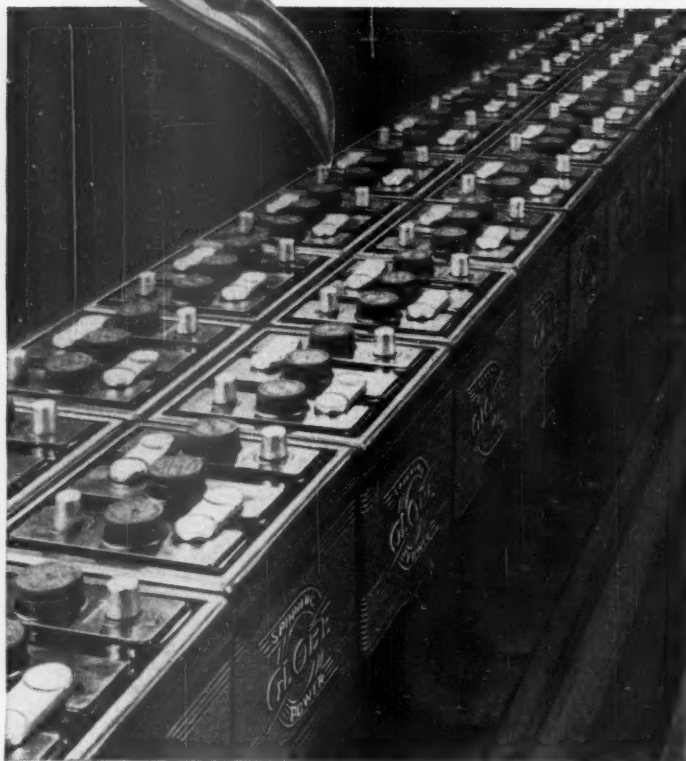
**THE KAYDON ENGINEERING CORP., Dept. B, MUSKEGON, MICH.**

KAYDON Types of Standard or Special Bearings: Spherical Roller • Taper Roller  
Ball Radial • Ball Thrust • Roller Radial • Roller Thrust • BI-ANGULAR Roller

• ALL TYPES OF BALL AND ROLLER BEARINGS 4" BORE TO 120" OUTSIDE DIAMETER •



## As alike as two GLOBE batteries...



### Uniformity by the million

**W**HETHER you order a hundred or a million... you can depend on absolute uniformity in Globe-Union built batteries. Identical processes and equipment are in use at all 13 Globe-Union battery plants. Standardization is complete to the smallest detail. Precision production is a fact, not a phrase. "Spinning Power, split-second starting, longer life"... these characteristics for which Globe-Union built batteries are known 'round the world are dependably yours in every battery, size for size, type for type, year after year.

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Los Angeles, Calif.  
Memphis, Tenn.  
Milwaukee, Wis.  
(4 factories)

Mineral Ridge, Ohio  
Oregon City, Ore.  
Philadelphia, Pa.  
Reidsville, N. C.

### NEW PRODUCTS BRIEFS

Filters used in air-conditioning systems are cleaned, rinsed, dried, and oiled by a machine called Safe-N-Ezy. It is available from Paxton-Mitchell Co., 27th and Martha Streets, Omaha 5, Neb. It can handle about 75 filters an hour.

Highway weight limits on trucks have spurred development of high-horsepower engines that are light in weight. White Motor Co., Cleveland 1, Ohio, now has a 150-hp. Mustang engine, Model 250A, that weighs only 1,013 lb.

Porcelain-finish enamel for redoing kitchen refrigerators is available from Sapolin Paints, Inc., 229 E. 42nd St., New York City. A pint covers a refrigerator inside and out, retails for \$1.40. You apply it with brush or spray.

A hand-propelled lift truck made by Clark-Hopkins Equipment Corp., Philadelphia 23, has a built-in hydraulic hoist for lifting and stacking such items as heavy cases and oil drums. Called Lift Stacker, it has a capacity of 500 lb., lifts loads to a height of 54 in.



### Sweet Music—Washable

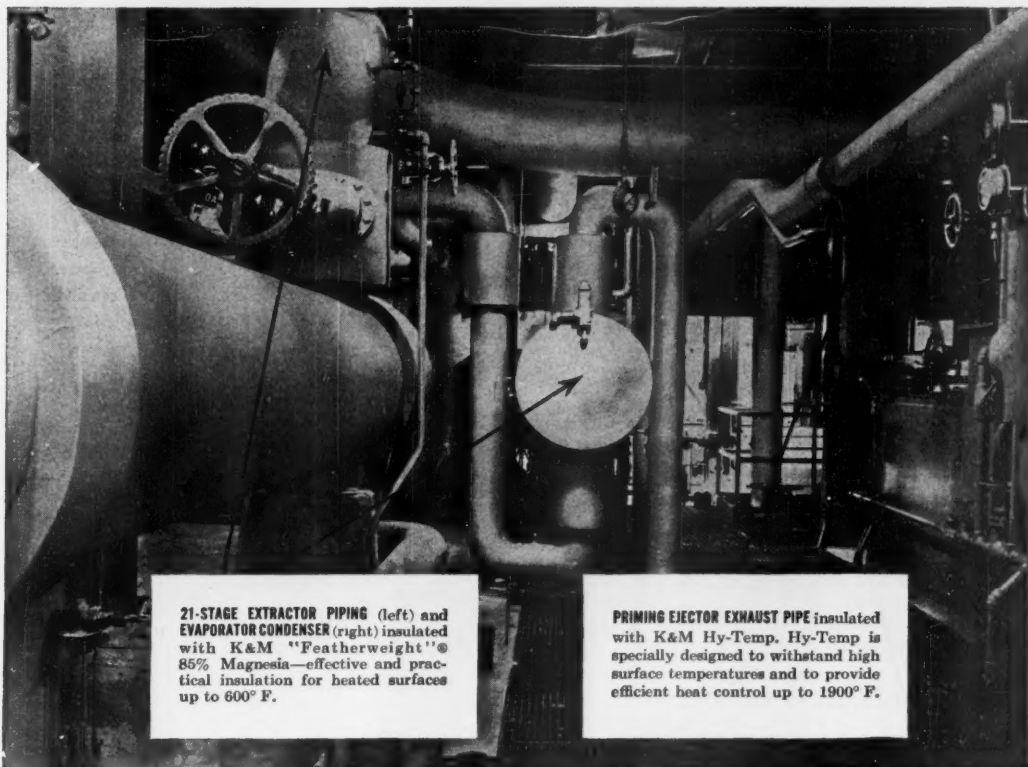
To jittery parents this may look like more juvenile pandemonium, but Magnus Harmonica Corp., Newark 5, N. J., hopes to sell them on the idea that it's really music. The maker of the small-size American version of the pipes—in plastic, of course—promises that the sounds will be sweeter, less plaintive than the wail of traditional bagpipes. Magnus makes the molded reeds and pipes of Bakelite styrene, the bag and ribbons of Vinylite. The instrument is washable, retails for \$6.





*Where the best in insulation is a must*

Public Service Co. of Oklahoma uses  
K&M Insulations in Weleetka Power Station



21-STAGE EXTRACTOR PIPING (left) and EVAPORATOR CONDENSER (right) insulated with K&M "Featherweight"® 85% Magnesia—effective and practical insulation for heated surfaces up to 600° F.

PRIMING EJECTOR EXHAUST PIPE insulated with K&M Hy-Temp. Hy-Temp is specially designed to withstand high surface temperatures and to provide efficient heat control up to 1900° F.

*Insulation Contractors: Armstrong Cork Company*

## These K&M insulations keep steam hotter—longer—at less cost!

In power stations, oil refineries, chemical plants, factories, steamships, hospitals—in fact, wherever exacting steam control is a must—you'll find K&M "Featherweight" 85% Magnesia and K&M Hy-Temp Insulations. These two K&M products give you highly efficient, cost-cutting insulation in every service temperature range. And, for especially difficult heat control situations, the advantages of both are combined in K&M Hy-Temp Combination Insulation.

Your Keasbey & Mattison Distributor—who is an experienced applicator—will be glad to give you complete information on these or any K&M Insulations. Or, write us.

*Nature made Asbestos...*

Keasbey & Mattison has made  
it serve mankind since 1873



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COMPANY • AMBLER • PENNSYLVANIA

*In Canada—ATLAS ASBESTOS CO., LTD., MONTREAL, TORONTO, WINNIPEG and VANCOUVER*

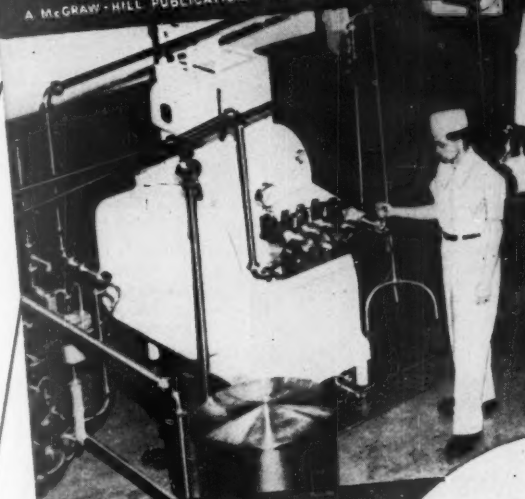
PACIFIC EDITION

# Food Industries

# FOOD

# FOOD

A MCGRAW-HILL PUBLICATION • FORMERLY FOOD INDUSTRIES



*In This Issue :*

Continuation series of people  
operating Technical and E  
in food processing plants

## PLANT MANAGERS SUPERINTENDENTS

**CORPORATE  
OFFICIALS**  
President  
Vice President  
Treasurer  
Secretary

The Men  
In  
Food Processing  
Plants  
Who Buy  
or Influence  
Buying

**ENGINEERS**  
Mechanical  
Chemical  
Industrial  
Maintenance

**FOOD  
TECHNOLOGISTS**  
Quality Control  
Managers  
Chief Chemist  
Research  
Director

# ANNOUNCEMENT

## ENGINEERING carries forward

With the April 1951 issue, McGraw-Hill's magazine "Food Industries" changes its title to **FOOD ENGINEERING**. As readers know, the magazine has pioneered in the application of advanced food plant and product engineering since it was launched in 1928. The target is now brought into sharper focus.

**FOOD ENGINEERING** is a more specific and self-defining title for the magazine that serves the engineering needs of food processing plant management. The change in name will be accompanied by an expansion of that part of the editorial content that provides up-to-date know-how for the corporate officials, plant managers, engineers, quality control men, food technologists, and others who hold responsibility for the equipping and operating of food plants.

### Why food plants must modernize

The application of engineering methods was greatly accelerated to meet the heavy processed food demands of World War II. This trend has continued through the postwar years, and now is receiving new impetus from the defense program. This impetus comes from the need to cut costs, to get along with less manpower, and to increase production while not only maintaining, but improving, quality.

### Engineering is applied to all branches of the industry

The formulation, processing, packaging, and physical distribution of processed food is engineered whether it be in the baking; meat, poultry, fish, fruit and vegetable, dairy, cereal, confectionery, or non-alcoholic beverage branches of the industry. And the same applies to wines, malt liquors, coffee, tea, spices, sugar, salt, shortening, extracts, and in fact, all processed food products.

### Engineering operations common to all food plants

Food plants have in common many engineered unit operations and plant services and facilities. Typical are mixing, cooking, refrigerating, materials handling, grinding, and separating. Engineered instrumentation is extensively applied to the production lines to insure uniformity of quality and as a necessary part of advanced continuous processes. Food plants must be continuously clean — a fact that calls for engineered sanitation. Finally, the product is filled into an engi-

neered package or container on an engineered packaging line.

The 33-billion-dollar food processing industry spent well over \$600,000,000 in 1950 for plant and equipment improvement. The figure for 1951 will probably be higher. The world's oldest and in many respects biggest industry is, of necessity, becoming one of the most modern.

### Engineering is the common denominator

Engineering links all branches of the food field. The magazine, under its new title **FOOD ENGINEERING**, hopes to serve the public by increasing the efficiency of the food industry and thus help maintain or improve the standard of living of the country.

### FOOD ENGINEERING hits your sales target

**FOOD ENGINEERING** serves the engineering functions and interests of all who have any responsibility for the equipping and operating of food processing plants, whether they be corporate officials, plant managers, engineers, food technologists, or their various associates and assistants.

**FOOD ENGINEERING** shows these men how to engineer new products and improvements in production volume, in efficiency, in cost reduction, and in product quality. It helps them improve their jobs—make their enterprises more profitable.

**FOOD ENGINEERING** sets the ideal stage for advertising that helps food-plant executives to produce more and better foods at lower cost.

A MCGRAW-HILL PUBLICATION  
McGraw-Hill Building, New York 18, New York  
ABP • ABC

# FOOD ENGINEERING



### Electrical Contractor Lauds KLIXON Protectors as "Customer-makers"

WILMINGTON, DEL.: W. G. Mayer, Assistant Treasurer, McHugh Electric Company, is a man in a position to know what he is talking about in his following strong indorsement of KLIXON Protectors. In Mr. Mayer's own words: "We repair from 8,000 to 10,000 electric motors per year, about three-quarters of which are used in home appliances. Our experience in this work shows beyond question that KLIXON Protectors prevent winding burnouts. We believe that breakdowns could be greatly reduced, and customer satisfaction increased, if all appliance motors had KLIXON protection."



Automatic  
Reset



The KLIXON Protector illustrated is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., it keeps motors working by preventing burnouts. If you would like increased customer-preference, reduced service calls and minimized repairs and replacements it will pay you well to ask for equipment with KLIXON Protectors.

**SPENCER THERMOSTAT**  
Div. of Metals & Controls Corp.  
2603 FOREST STREET  
ATTLEBORO, MASS.

## It pays to *defense* do business in New York State

Nearness to subcontractors and suppliers is a boon to manufacturers holding prime defense contracts. The Empire State puts a multitude of processed and semi-processed materials plus all forms of manufacturing equipment at your front door. Detailed information on the production facilities of 2,000 plants engaged in various metal-working operations is also on file in Albany and readily available. For help in solving your defense-production problems, write: N. Y. State Dept. of Commerce, Room 136, 112 State St., Albany 7, N. Y.

# MARKETING

## How 1,243 Salesforces Are Paid

	Salary	Salary Combinations	Commission with Guaranteed Draw- ing Account	Commission Plans without Guarantee	Total No. of Salesforces
Manufacturers	25%	53%	7%	15%	672
Agents and Brokers	4%	58%	0%	38%	26
Wholesalers and Distributors	9%	36%	18%	37%	286
Industrial Distributors	16%	50%	12%	22%	32
Wagon Distributors	35%	35%	6%	23%	17
Retailers and Dealers	7%	49%	16%	28%	69
Other Service Organizations	25%	29%	11%	35%	141
All Salesforces	20%	46%	11%	24%	1,243

©BUSINESS WEEK

## Best Way to Pay Salesmen

Sales managers wish they knew it. Survey shows many of them are dissatisfied with their company's method. Trend is toward some combination of commissions and salary.

Sales managers traditionally are harassed and unhappy men. What makes them that way? One very good reason came to light in a recent survey: They don't like the way their company pays its salesmen. And they aren't sure what to do about it.

This is one of the major conclusions reached by Harvard University's Graduate School of Business Administration and National Sales Executives, Inc. (the sales managers' trade association). Their joint survey of Salesmen's Compensation reports that one out of four sales managers is "actively dissatisfied" with his company's compensation plan and is trying to improve it.

None of the 11 compensation plans described in the survey's questionnaire meets with complete approval. One out of three sales managers dislikes salary plans; one out of five dislikes commission plans. It's clear that "no compensation plan represented a complete solution to the problem of paying salesmen fairly in all situations."

The Harvard-NSE study covers 1,011 different companies, 1,243 sales forces, and 92,667 salesmen. It represents a 20% sampling of NSE member companies who employ "outside" salesmen (as opposed to "behind-the-counter" salesmen). Sales managers of companies that sell a wide variety of consumer and industrial products and services on national, regional, and local bases have

filled out the exhaustive questionnaire.

• **Combinations**—The most marked trend brought out in the survey is the widening use of combined salary and incentive pay compensation plans. This is a fairly recent wrinkle—56% of the salary combination plans have been in use less than nine years while about half of the salary plans have been in effect over 16 years. More and more firms are shifting to salary plus some form of incentive. The report concludes the trend "reflects the need for more incentive in selling and at the same time, salesmen's desire for a measure of stability in earnings. . . ."

The survey found that of 163 sales forces that shifted from salary plans, 114 adopted a salary and incentive combination, 39 a commission and drawing account plan, and 10 a straight commission plan. Of the 1,243 sales forces, 248 were paid on a straight salary basis; 293 on a commission basis; and 702 some combination of salary and commission or bonus (chart, above).

• **Wide Range**—Sales executives often wonder how the wages they pay their salesmen stack up with those in the rest of their industry. The report spells out the range of salesmen's earnings—from less than \$1,000 to \$75,000 a year; average earnings for experienced salesmen are \$5,400. Wide variations are found in almost all industries.

A few patterns emerge. Men who sell



consumer goods generally earn less (\$5,000) than those who sell industrial goods (\$6,200). As you might expect, salesmen who are paid a straight salary earn less (\$5,000) than those who get commissions and bonuses (\$5,700).

The nature of a salesman's job also affects the amount of money he earns. Manufacturers' salesmen get higher incomes than wholesalers' and retailers' outside salesmen. And 78% of manufacturers' salesmen are paid a salary or salary-incentive combination; 45% of wholesale forces get salaries. Consumer-product salesmen with routine jobs generally get below-average earnings—driver-salesmen on retail and wholesale wagon routes earn an average of only \$3,800 a year. On the other hand, salesmen who sell consumer products of high unit value like automobiles and major home appliances average \$6,900 a year.

• **Turnover**—Sales managers say the rate of turnover among salesmen averages about 10% a year. Surprisingly, 147 of them said they had no turnover; in one case, a 2,000% turnover was reported. If you pay your salesmen on a commission basis, chances are your turnover will be higher than if you pay them a salary.

Does the type of compensation plan affect the number of hours a salesman puts in? The survey found that sales forces work an average of 42.6 hours a week. Of the sales forces on commission, some 24% to 28% work more than a 48-hour week. On the other hand, a considerable proportion put in 33 hours a week or less. Commission plans apparently inspire different reactions in salesmen. They either knock themselves out on a long work week, or find selling on commission is so easy that they fold up after a short week.

• **Revisions**—Operating problems that give sales managers the most trouble are review and revision of earnings; deciding which man should get the credit on joint orders; determination of house accounts (accounts on which no commission is paid); and handling of drawing accounts.

The survey concludes that "the compensation plan is just one of the managing techniques available to sales managers. A good many sales managers lay more stress than is warranted on the particular nature of the compensation plan and too little stress on factors connected with the job; the supervision of the salesmen, definition of objectives, training, and the relationships salesmen develop with their customers and prospective buyers. . . . The satisfactory operation of a salesman's compensation plan depends as much on the reputation for fairness of the management and the wisdom of its administration as on the inherent excellence of the particular plan itself."

# "BURR-PROOF"

Reg. Trade-mark

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## DoALL GAGE BLOCKS

A = METAL REMOVED BY FINAL LAPPING

SHARP EDGE



### CONVENTIONAL GAGE BLOCKS

Ordinary usage raises burr or "wire edge" at sharp microscopic edges of standard gage blocks—which makes them unusable.



BLENDED RADIUS NO EDGE

### DoALL "BURR-PROOF" GAGE BLOCKS

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Now, without added cost, you can have the new DoALL "BURR-PROOF" gage blocks that last twice as long as other standard blocks. Think of the great savings in replacement costs, fewer rejects and better quality products! Developed and used exclusively by DoALL, burr-proofing is the latest major achievement in gage block history. It "re-rounds" the edges of the blocks to prevent formation of microscopic burrs caused by ordinary usage. Burred edges are a major reason for discarding gage blocks—even a burr only 2 millionth inch can make a block unsuitable.

Although gage makers round the edges of the blocks to prevent burrs, the purpose of rounding is defeated by final lapping, which produces unwanted sharp edges. These become burred by the slight shocks and jars of normal handling. Mechanical operations to re-round the edges after lapping are avoided as they invariably cause distortion. Therefore the sharp edges left have been tolerated as a necessary evil—until the new DoALL process that "re-rounds" edges without distortion.

### Part of DoALL's Integrated Inspection System

All DoALL gage blocks are burr-proofed. They are the key units of the integrated inspection equipment that DoALL manufactures for industry.

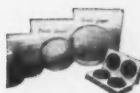
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Here a 5-hp. Frick unit cools a room measuring 53 by 23 feet, protecting a large display of chocolates, and keeping customers comfortable. Installation by Marr Engineering Co., Frick Distributors at Reading, Penna.

There's a Frick air conditioning system to suit the exact needs of your business. Write now for literature and estimate.



Also Builders of Power Farming and Sawmill Machinery

## Butter for Bakers

New emulsified product is butter's hope to win back bakers from vegetable shortening. Only trouble: It costs more.

Nowadays, the butter and commercial baking industries have only a nodding acquaintance. Commercial bakeries use butter mainly for flavoring and coloring cakes and pastries—it's no longer a major ingredient. The cheaper vegetable shortenings, the high price of butter, and the big demand for commercial baked goods have seen to that.

• **New Contender**—But the butter industry would like to get back to a clubby arrangement with the bakers. A new product that may help it do just that is an emulsified butter shortening. It is said to have all the attributes of pure butter, plus being able to do anything emulsified vegetable oil shortening can.

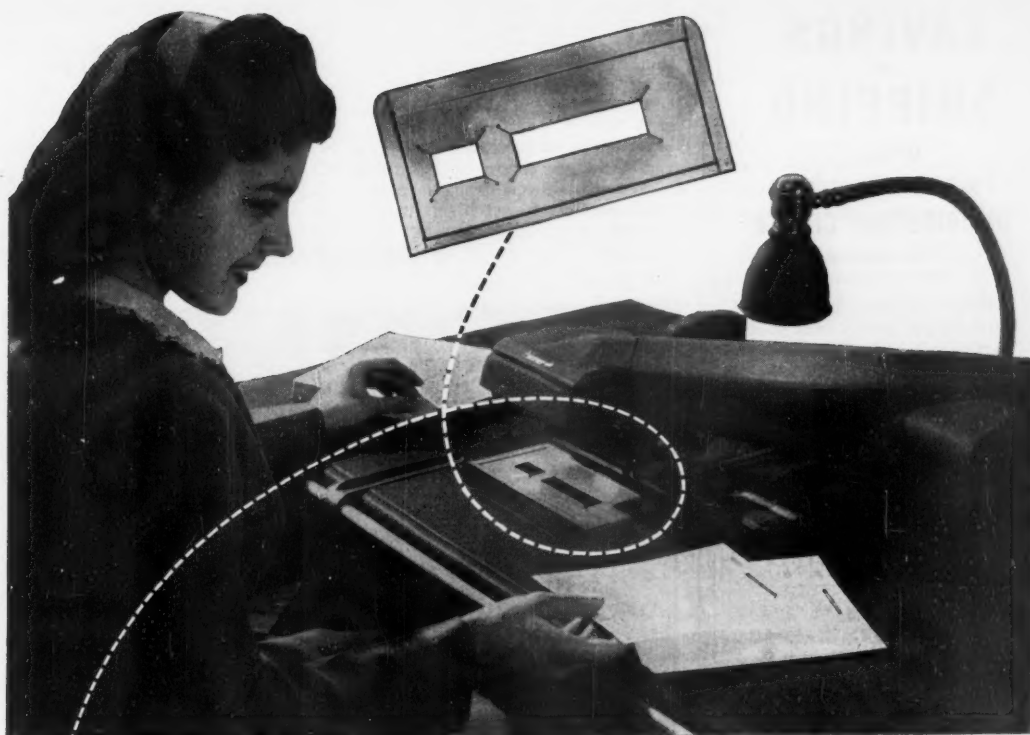
H. C. Christian Co., Chicago, has just been given the first license to manufacture and distribute the new shortening, which was developed by John A. Maas & Associates, Ltd., Cincinnati.

Christian Co., one of the oldest and largest wholesale butter houses in the East and Midwest, has long-term contracts with 150 creameries. Christian Co. buys the output of the creameries, specifies the amounts and types of products it wants. Some of the creameries Christian Co. does business with will manufacture the new shortening—and easily, too, because it can be done with existing creamery equipment. Potential production is estimated at 8-million to 10-million lb. a year.

• **More Butter for Cakes**—The U. S. Food & Drug Administration has already given its approval to the manufacturing process for the emulsified butter shortening. The American Butter Institute and Associated Retail Bakers of America agree that it "presumably opens new outlets for the creamery butter industry" and has "definite promotional possibilities in increasing the use of butter in baking."

John A. Maas, inventor of the new shortening, has had a varied career. He's been a chef, baker, baker's consultant. Other members of John A. Maas Associates include Maas' brother Frank, who has been in the baking industry; a patent attorney; and two other men associated with the baking industry. Maas has a farm at Stotler's Crossroads, W. Va. (about 90 miles from Washington), where he is setting up a pilot bakery and laboratory for working out recipes using the new shortening.

• **For Bakers Only**—Maas has little to say about how the shortening is made. About all that's known about the



## ...at the "Business" End of Business Machines

Much of your morning's mail probably was directed to your desk with the help of ENDURO Stainless Steel. For, at the "business" end of high-speed addressing machines, embossed information plates engage inked ribbons through windows of ENDURO ribbon guards. Here, ENDURO resists ink-caused corrosion, resists the abrasive action of the moving ribbon, resists deformation, stays "springy."

On the same machines, ENDURO is used for "lister spacing bands"—punched ribbons which control the precise listing of tabular data at speeds as high as 6000 figures a minute. Where out-of-round holes would cause misalignment, ENDURO resists wear.

What jobs will ENDURO be given next? It's already doing so many so well.

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its contribution to their blazing speed. The absolute purity of your foods, drugs and beverages is a testimonial to its sanitation. Coal mine shaker screens testify to its strength and toughness. The list is endless . . . and growing.

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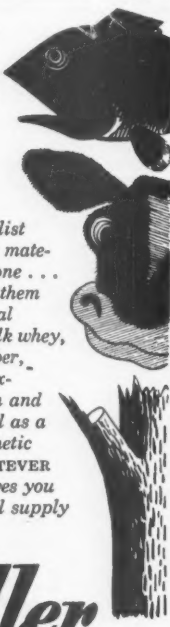
## What are Fuller Adhesives Made Of?

Even a partial list of adhesive raw materials is a long one... but Fuller uses them all! Fish, animal by-products, milk whey, tree resins, rubber, starches and dextrines from corn and tapioca—as well as a number of synthetic materials. WHATEVER kinds of adhesives you need, Fuller will supply them!

# Fuller

ADHESIVES FOR INDUSTRY  
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San Francisco 3, Buffalo 7



process is that it begins with full natural cream, contains a minimum of 80% butterfat (the same as butter). An associate remarks vaguely that emulsification "happens during the churning." It's strictly a commercial baker's product, will be used only in cakes for the present.

Problem is to get bakers interested in using the new shortening. Christian Co. salesmen are conducting an educational campaign to get bakers to give it a trial. Since different recipes have to be used with emulsified butter short-

ening, Maas worked with Christian Co. to develop a new set of formulas to guide the bakers.

• **Price-Quality Factor**—Pricewise, the new shortening compares with the commercial butter bakers use, is higher-priced than vegetable shortenings. But Christian Co. thinks it will compete with them on a quality basis. Christian Co. claims that emulsified butter shortening goes farther, produces better flavor, and insures longer shelf life through its better moisture-retention qualities.



SAN ANTONIO KIDS queued up by thousands for National Biscuit Co.'s party for Donald Duck bread. Donald's official studio voice—Clarence Nash—quacked a welcome.

## Pure Quackery Sells Bread



MODEL AND FRIEND go for a stroll down San Antonio street. Promotion buildup lasted for a whole week.

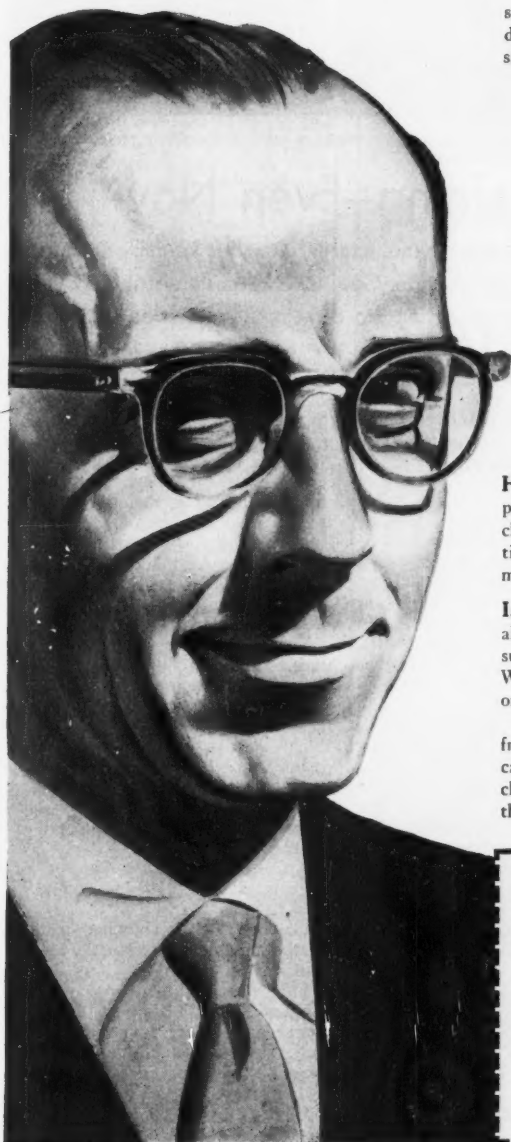
Donald Duck started life as an animated cartoon character with an irascible nature. Today he is also a trademark that gives brand identification to over 500 products—from jewelry and toys to citrus juices, rice, and bread.

Donald Duck got into bread about a year and a half ago. Bakers, who have been fighting against a diminishing per capita consumption of bread for years, welcomed him with open arms. In one sensational case, a baker scrapped an old trade name in favor of Donald Duck, and sales leapt from 3,500 loaves a week to 45,000.

All told, some 100 bakers are now licensed to use Donald Duck wrappers or end-labels on their bread. When a licensee introduces his bread in a new area, the Walt Disney organization goes all-out. Biggest splurge was National Biscuit's job in San Antonio (pictures). The big show drew 3,700 kids to the Majestic, and 2,700 more overflowed into a second theater. On Monday NBC broke all local records for the sale of bread.



## So you've got a military contract?



**Sure...** it's tough to get into production. But let me tell you about how another manufacturer handled that problem.

His name's Harry B. — Harry makes automotive parts. Last December, he landed a big Defense Order, too. I got a rush call.

"Look," he told me the minute I got my foot in the door, "We're supposed to start deliveries in 90 days. Making the product is a cinch, but there are two headaches I haven't solved that I think maybe you can fix. First, I've got to establish my requirements for raw materials, parts, and assemblies. And second, I've got to get them in, in sufficient quantities, at the right time, to meet my production schedules."

"I need a system. One that will work, and *work fast*. Got any ideas, any systems? Ever organized a job like this for anyone else?"

Well, I didn't have time to start from scratch on Harry's problem, so I dropped back to the office and began digging around in our data files. Took me a couple of hours. I got back to see Harry the same day. Here's what I suggested, and Harry bought, on the spot:

**1. A SIMPLIFIED PRODUCTION AND COST ACCOUNTING SYSTEM** that turns out punched-card reports *daily* on material requirements, production progress, and material and labor costs. This gives Harry the *Fact-Power* he needs to keep on top of his costs and delivery schedules. And he uses the *same* punched cards to produce all his payroll records!<sup>1</sup>

**2. A KARDEX INVENTORY CONTROL SYSTEM**, the same one we installed for many war contractors from 1940 to 1945. This system flags a warning whenever stock of any item is running too low in relation to production requirements. As a dividend, it's got Harry ready for any kind of Controlled Materials Plan that may come.<sup>2</sup>

**3. AN EFFECTIVE PROCUREMENT SYSTEM** — basically the same thing we have put in recently for scores of manufacturers. It's a simplified purchase-order control that gives a quick daily check on all items due for vendor follow-up.<sup>3</sup>

**How Much Did It Cost?** It will take about five months to pay for Harry's new system out of actual, provable savings on clerical work alone. But, as Harry points out, his big gain is in getting maximum production from his present facilities—with deliveries made on time.

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of a nail . . .*



• and for the want of a hose line costly machines have been "knocked out" of operation and valuable man-hours lost. That is why more and more plants today carry a supply of Aeroquip Bulk Hose and Aeroquip detachable, reusable fittings. A damaged hose line can be replaced as quickly as a new length of hose is cut to size and end fittings attached—a matter of minutes!

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**FLEXIBLE HOSE LINES  
WITH DETACHABLE, REUSABLE FITTINGS**

AEROQUIP CORPORATION, JACKSON, MICH.



DEALERS practice installing Coleman heaters, as part of company's program of . . .

## Sales Training—Even Now

Coleman, heater manufacturer, launches \$2-million program despite drooping production. Goal is to keep its distribution setup intact during emergency, and to develop savvy dealers.

Sales managers are constantly being urged to keep a sales training program going against the day when hard selling will return. This is long-range thinking. But does it really make economic sense now, with income rising and production dropping?

The Coleman Co., a major home heating manufacturer, thinks it does. It is so sure of it that it has just launched a \$2-million, five-year sales training program at its Wichita headquarters. By the time the program is finished, Coleman hopes to have run no less than 1,600 dealers through the Coleman Heating Institute. This is by far the largest such program the company has ever undertaken.

• **The Reasons**—Coleman justifies its effort partly on the usual grounds. Says executive vice-president Sheldon Coleman (son of the founder, 80-year-old W. C. Coleman, now president and board chairman), "It should keep dealers on their toes for the day when selling will again be necessary." But along with this, the program is also intended:

• To keep intact the Coleman sales setup, no matter what happens during mobilization. Last time Coleman went 100% into war work—and its sales organization fell apart. This time Coleman doesn't expect to become that deeply involved in defense work. Even so, it is taking no chances about its sales setup.

• To give its dealers the entire

picture on sales, installation, and design of Coleman equipment. "This should mean," says Sheldon Coleman, "that dealers themselves can then train new people should workers leave for the Army or other jobs. Or, at worst, it will give them enough knowledge of the work to do it themselves if they lose all their employees."

• To keep maintenance of home heaters on a high standard during a period when fuel saving may be necessary and it may be hard to get new heaters or parts.

• To keep the sales pressure on during the uncertain period now coming up. The company figures that its production this year will hit about 75% of last year's. Balancing this dip, it thinks, will be the loss in sales because of the anticipated drop in home building. The company eyes with misgivings the big inventories of home appliances now on hand throughout the country. "All these things," says Sheldon Coleman, "indicate that the lush markets of late 1950 and early 1951 may tighten."

• **Gasoline Lamp**—Thinking in terms of sales training comes naturally to Coleman.

Fifty years ago, the company (it was then called Hydro-Carbon Light Co.) launched its career with the manufacture of a gasoline pressure lamp—the famous "Coleman Lamp." Gradually its line grew to include other such gasoline pressure products as lanterns, self-

heating irons, camp stoves, and hot plates. Today, Coleman claims, it makes 75% of such gasoline appliances in the U.S. But these smaller appliances account for only 25% of the company's entire sales volume.

The depression changed Coleman from its original course to more complicated and heavier products. Not only was business bad, but Coleman executives saw the handwriting on the wall for its appliances. Rural electrification threatened to do away with the major market, the farm. In 1932 Coleman began making gas floor furnaces for a mail-order house.

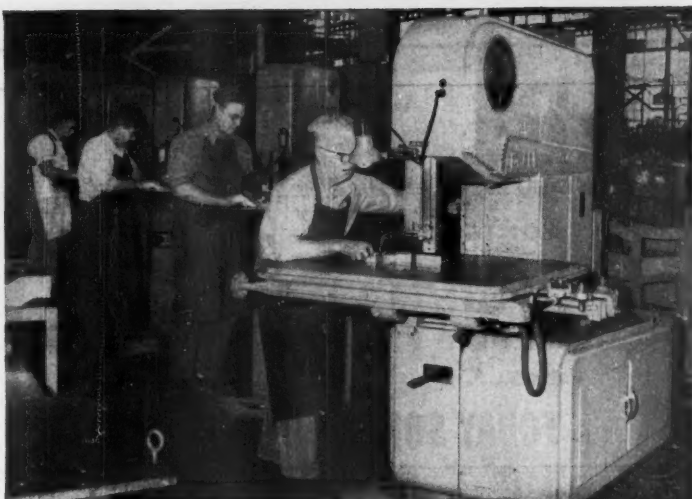
• **More Heaters**—From there it spread deeper into the heating field: oil heaters (1935), oil floor heaters (1940), oil water heaters (1946), oil warm air heaters (1947). Two years ago, in a big burst of activity, Coleman put out on the market a new series of gas heaters. Chief among these was the Blend-Air system, which employs a forced warm air heater and prefabricated warm air ducts (only 3½ in. in diameter) that are easy to install (BW—Jul. 9 '49, p48).

These new products meant continued changes in Coleman's distribution system. Its original small appliances were distributed through hardware stores, later through sporting goods outlets. The new heating equipment required new types of outlets. So in the late 1930's Coleman first began to distribute through appliance stores, department stores, and similar outlets. Such stores could handle the Coleman packaged heating units because installation was fairly simple. At the time the war forced it out of the civilian market, Coleman was selling its products through 50 wholesalers and 10,000 retailers.

After the war, Coleman picked up the pieces and set to work building up a new distribution system. By 1948 it had acquired 75 distributors and 15,000 dealers. Hardware and appliance stores accounted for 90% of sales.

• **Contractors**—Then, in 1950, Coleman pulled a switch. It decided to tap, for the first time, plumbers and heating contractors. Coleman figured that its Blend-Air and other packaged heating units were natural for these outlets. It figured correctly. Today, somewhere between 10% and 20% of Coleman's dealer list comprises these heating contractors, and hardware and appliance stores now only account for about 70% of sales.

Last year Coleman's net sales hit \$33.8-million, only a shade below its peak of \$34.3-million in 1947. In these circumstances, it is easy to see why, as Sheldon Coleman says, the company hopes through its training program "to bind as many good dealers to us as we can—and as fast as we can—for the long haul."



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A World War II DoALL success factor is an even greater feature of the new

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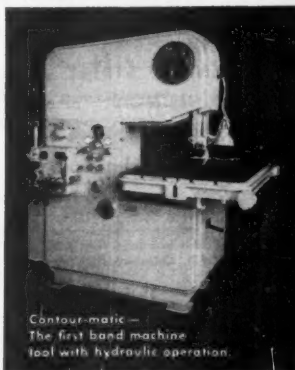
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MY FIRST  
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## Ferment in Rum

Tie-in sales on Scotch worry Bacardi Imports. It will be bad business if Bacardi drinkers have to load up on off-brands.

The American public is slated to be the goat again in the old tie-in sales racket, according to Bacardi Imports, Inc.

Bacardi is concerned because retailers wanting a case of Scotch whisky have to take several cases of off-brand rums, or other slow-moving merchandise, as well. The company feels it has a legitimate gripe, since it's the injured party when Bacardi drinkers get loaded up with off-brands of rum. (Bacardi distributes about 95% of the Cuban rum and about 40% of the Puerto Rican rum shipped to the U.S.)

Bacardi has taken half-page ads in New York, Boston, and Chicago papers to warn the public what's going on.

• **What's Behind the Tie-Ins**—It isn't that Scotch is scarce. The Korean war scare panicked many wholesalers and retailers into stocking up on all the Scotch they could get their hands on. Importers started to allocate supplies. But in the meantime, warehouse stocks took a nose dive. Dealers who had been able to stock up were sitting pretty; those who hadn't were just out of luck. To make matters worse, some brands of Canadian whiskies ran "short." But Scotch distillers are still able to replenish the warehouses.

So, although the fear of a shortage of Scotch seems to be unfounded, wholesalers and distributors who have it are hanging on to it and are doling it out to retailers. That's where the tie-in sale comes into the picture.

• **History Repeats**—The tie-in practice is raising hob with the advertising and promotion program for Puerto Rican rum sponsored by the Puerto Rican government (BW—Dec. 10 '49, p. 52).

Bacardi fears that tie-ins will be a repetition of a World War II nightmare. After the war, rum shipments from Puerto Rico and other sources hit rock bottom, because wholesalers and retailers were loaded to the gills with rum they had taken in tie-ins to get scarce whisky. By last year these wartime and postwar inventory surpluses had been practically liquidated. Now it looks as if the whole thing were starting over again.

Tie-ins are a violation of many state liquor control laws, including the Ryan-Hallowell Act in New York. But the practice is a tough one to stop. Retailers may go on griping quietly, but few if any of them want to risk losing their sources of supply by giving testimony.



## MARKETING BRIEFS

The buyers' market in appliances has far from disappeared, despite impending shortages. Example: In New York City you can still get a Bendix washing machine listed at \$189.95 for \$159 at discount houses.

Colored oleomargarine can now be sold in two more states—Delaware and Connecticut. But New York's ban against colored oleo may stay in force another year. Legislators are tangling over a proposed tax of 2¢ a lb.

Retail sales summary for January from the Dept. of Commerce corroborates the fact that the post-Christmas buying wave has been pretty much across the board. January sales of auto dealers were up 29% over January last year; sales of furniture-household-radio dealers were up 32%. But apparel stores (up 27%) and department stores (up 33%) did well, too.

California milk prices are being upped  $\frac{1}{4}$ ¢ on top of a recent 1¢-a-qt. increase (BW—Jan. 13 '51, p52). Last increase went to producers. New one—already granted in Los Angeles area—goes to retailers and distributors. Dissident Safeway Stores has protested to OPS about latest "unwarranted" increase.

Synthetic fabrics at last got a foot in the Army's door. It announced "summer uniforms of tropical-type fabrics other than tropical worsted have been authorized for wear by Army personnel." But GI's and officers must buy their own if they want synthetic fabrics. The Air Force and Marine Corps still prohibit synthetics in uniforms.

Federated Department Stores, Inc., topped last year's sales with \$389-million for the 53-week fiscal year ended Feb. 3, 1951. Sales for 52 weeks ended Jan. 28, 1950, were \$358.5-million.

Fiberglass draperies are back. Witcombe, McGeachin & Co., Inc., New York manufacturers and distributors, will have a line of 40 designs ready for the institutional trade by mid-April. Owens-Corning Fiberglass withdrew the draperies from sale five years ago to perfect them. It thinks its new Coronizing process overcomes roughness and other difficulties.

Power of a name: In business less than two years, Hines-Park Foods, Inc., has granted 100 franchises to food and dairy manufacturers to use the Duncan Hines Label. Latest product to go on the market is Duncan Hines coffee, packed by Woolson Spice Co., Toledo, and made to Hines' specifications.

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Your Satisfaction Guaranteed!

Speed business or personal greetings the impressive way with FLOWERS-BY-WIRE. Deliveries made on credit from anywhere to anywhere in the world if you hold a Worldwide Credit Floracard. Business firms and responsible persons are invited to obtain Floracards from official F. T. D. FLORISTS . . . ask where the famous Mercury Emblem is shown. 15,000 Interflora member shops honor Credit Floracards.

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FLORISTS' TELEGRAPH DELIVERY ASSOCIATION, 200 Lafayette Building, Detroit 26, Mich.

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No grease-barrier



### JUST ANGIER VPI\*-WRAPPED to STOP RUST AT LESS COST

Now packaging is speeded up... and these armatures arrive shiny bright with no oil or "goo" to be removed by customers.

Angier VPI Wrap is the simple, clean and *sure* way to prevent rust of your metal products in transit and in storage.

Enthusiastic acceptance by the industries listed below is the proud record of this pioneer vapor rust preventive — Angier VPI Wrap. Write for more details today!

\*T. M. Reg. U. S. Pat. Off. (Vapor Rust Preventive)

**Angier**

CORPORATION

Framingham 7, Mass.

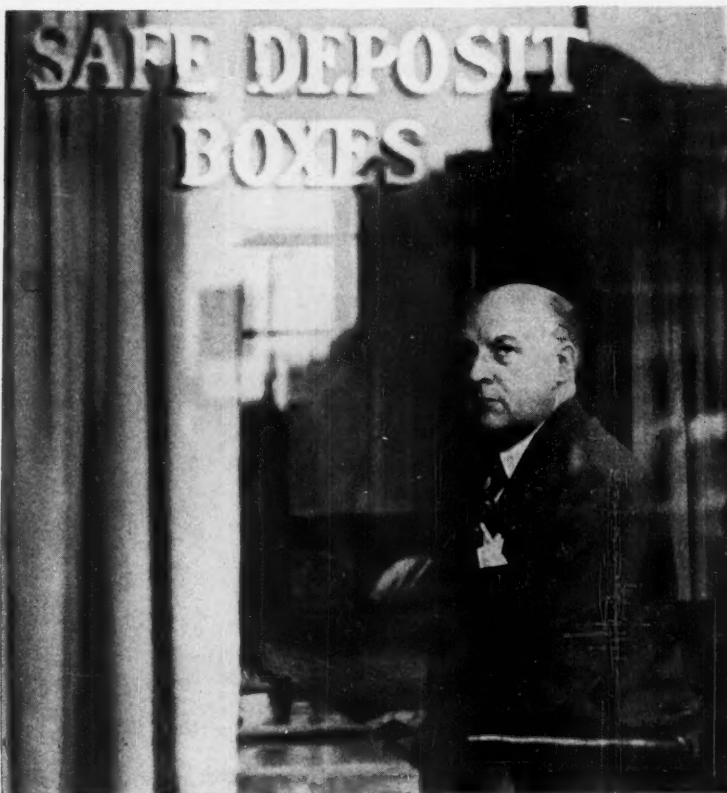
Industrial Packaging Engineers since 1895  
Representatives and Distributors in Principal Cities

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| <input type="checkbox"/> Machinery—Industrial, Metal Working, Farm, Office, Construction. | <input type="checkbox"/> Steel in process of fabrication. |
| <input type="checkbox"/> Electrical Machinery, Appliances, Products.                      | <input type="checkbox"/> Instruments and clocks.          |
| <input type="checkbox"/> Fabricated Products—Cutlery, Hardware, etc.                      | <input type="checkbox"/> Ordnance Equipment.              |
| <input type="checkbox"/> Transportation Equipment—Aircraft, Auto, Naval, Railroad, etc.   | <input type="checkbox"/> Others:                          |

Sign below; attach to your letterhead

## FINANCE



CRANDALL MELVIN, president of Syracuse's Merchants bank, gazes out from his main-

## Boss Banker Who Plays



NO FENCES guard Melvin. Clients walk to his desk, unscreened by secretaries.



lobby desk. Passersby can gaze back at . . .

## Easy to Get

Crandall Melvin likes to explain why his desk is in the window of his bank: "Halos have no place in the banking business. There's no difference fundamentally between a fellow running a dry goods store, a peanut stand, or any other commercial enterprise. Like them, he should be readily available to his customers, and most anxious to serve them to the fullest extent."

Melvin is president of the 100-year-old Merchants National Bank & Trust Co. in Syracuse. And he has been operating on his unorthodox banking philosophy ever since the day in 1938 when the Merchants' directors drafted him to run the city's oldest bank (it's the city's fourth-largest).

• **Out in the Open**—Right from the start he put his desk out in the open, in the main lobby alongside one of the wide street windows. No vestiges of

Cut  
Sales  
Costs  
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Increase  
Profits  
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Close  
More



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Dodge Reports are early news, issued daily, about construction jobs to be built . . . and about bidding and awards of contracts as these jobs progress. Available to cover your trading area, from a single county to 37 eastern states . . . issued in a manner to confine information to only those jobs which offer selling opportunities to you.

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- You may never have a chance to bid many of your best opportunities.
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- You can't keep informed on the changing factors and may lose out by not knowing *whom* to see and *when* to see them.

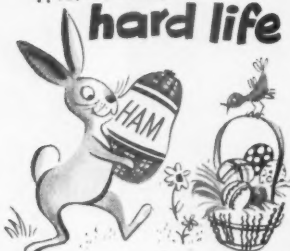
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<p>ATTACH TO YOUR LITTER- HEAD AND MAIL TODAY</p> <p>Please furnish me with further facts on how I can use Dodge Reports profitably in my business. I do business East of the Rockies.</p> <p>NAME _____</p> <p>TITLE _____</p>	<p>F. W. DODGE</p>  <p>CORPORATION</p>	<p><b>DODGE REPORTS</b></p> <p>CONSTRUCTION NEWS DIVISION</p> <p>F. W. DODGE CORPORATION</p> <p>119 West 40th Street, New York 18, N. Y.</p>
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BW-381

## Papers that lead a hard life



**Heeding Easter Tradition . . .** and also Spring-quickenened appetites . . . millions of households will renew a pleasant acquaintance with that pink-hued meat treat, HAM. Rhinelander Glassine and Greaseproof are both used in what most leading packers regard as the ideal ham package.



**Tailor-Made!** . . . One of the great merits of Rhinelander G & G\* papers is the variety of qualities that can be built into them. It is routine with us to "build" a grade of paper to meet a customer's precise needs, often doing a job that paper previously could not handle.



**Pert Little Accordion-Plated** baking cups of Rhinelander Glassine bring many a tasty, baker's product into your home. They appeal to both eye and appetite and provide convenience with cleanliness. Mighty useful, mind you, in your own home baking.

\*Glassine and Greaseproof—the functional papers that do so many tough jobs well.



**DRIVE-IN BRANCH**, the first in upstate New York, was one of Melvin's innovations.

iron railings surround him. Not only is he there, in full view of clients and passersby, but you can talk to him, too.

There's no scrutiny by an army of gimlet-eyed guards, no culling by a tell-me-first-what-you-want-to-see-him-about secretary. You just walk into the lobby, turn left a few steps, and there he is waiting to hear what's troubling you.

• **It Works, Too**—All this sounds like heresy to many a dignified, old-school banker. That doesn't worry Melvin. He has results to show. When he took over, Merchants was moving slowly; today it's by far the fastest-growing bank in Syracuse. Look at these figures:

**Depositors** now number 29,000, more than seven times the 4,000 on the books in 1937.

**Deposits** are around \$41.4-million, well over four times the \$9.5-million figure before Melvin took over.

**Capital funds** are around \$3-million. That's triple the 1937 total for common stock, surplus, and undivided profits. What's more, that growth hasn't come out of the stockholders' hides. Thanks to Melvin's dividend-paying policy in the past decade, he was recently able to sell them 25,000 shares of new \$10-par stock for \$20.

That's nice going for a man who isn't a "professional banker." Melvin had taught or practiced law for 25 years—less time out for World War I service—before taking over at the Merchants.

• **Annoyances**—As a lawyer, Melvin had had a long look at banking practices. His career as an active trial lawyer, and

as chief counsel and director of Central New York Power Corp., had brought him into contact with all the commercial banks in Syracuse. He knew what made them tick—and he didn't think they were geared to serve the community as they should. There were plenty of banking habits that he found outdated, or just plain annoying. Especially, he didn't like the custom of catering almost exclusively to the above-average income class.

As soon as he took over the Merchants, Melvin started eliminating practices that might annoy the clients. And he began enlarging services to include the nonwealthy.

• **Farm Business**—The attitude of Syracuse banks toward the Onondaga County farmers was a pet peeve of Melvin's. None of them, he felt, understood the farmer's financial problems or cared to expand into the farm field. City business seemed easier.

Melvin, who will be 62 next month, had been born and raised on a farm, attended rural grade and high schools. Turned banker, he set about expanding the Merchants' farm business, both deposit and loan. He didn't have to do much selling; as soon as he took over, farmers began coming to his bank.

Since he knew both farming and the farmers, it was easy for him to handle their loans, adjusting his policies to their seasonal borrowing needs. It was not long before the Merchants was the leading "farm bank" in town. In fact, it had to hire additional employees





**R**EGARDLESS of inflation or deflation, war or peace, fire or flood . . . life insurance continues to be the "best buy" in providing for the welfare of your family and in attaining financial security for yourself. This is well indicated by The Equitable's 91st Annual Report. During 1950 more people bought more Equitable life insurance protection than ever before. New Ordinary and Group insurance written last year amounted to \$1,410,000,000, bringing The Equitable's total insurance in force to \$15,278,000,000.\*

This total insurance in force represents money held for future delivery. When due, every dollar of that sum will be paid. But, as a responsible institution of thrift with more than six million people who look to us for economic security, we are concerned with the purchasing power of those dollars when they become due. For mounting inflation, man-made, threatens not

only the worth of the dollar but the very existence of our national enterprise.

Indeed this threat is as real and deadly as the Red menace against which we are arming. But the plain fact is that in the fight against inflation we, as a nation, are hiding under the bed! When we freeze wages or prices, we are merely doctoring the symptoms of the inflation-disease rather than the disease itself. If we are to stop the inflationary trend, the makers of our public policies must deal with the monetary causes of the inflation. They must control the expansion of bank deposits and the constantly increasing money supply.

Inflation is everybody's concern from the Wall Street banker to the Missouri housewife. In the fight against it, the American people—you and your neighbors—must learn to look beyond the local grocer's bill and the meat prices in the butcher shop . . . you must look to Washington, the seat of our Government, where the monetary policy is made. More than that . . . you must make your own voice heard among the law-makers. Congress should be interested in your views on inflation, and your Congressman is as close as your nearest mail-box or telegraph office. Simply stated—the action that you and your neighbors take can well decide the destiny of our country.

That's what we mean by "Operation People U.S.A."

*Thomas I. Parkinson* President

## CONDENSED STATEMENT OF CONDITION

as of December 31, 1950

Resources	Per Cent	Obligations	Per Cent
*Bonds and Stocks		Policyholders' Funds	
U. S. Government obligations.....	\$ 726,482,517 (12.7)	To cover future payments under insurance and annuity contracts in force.....	\$4,648,335,206 (81.5)
Dominion of Canada obligations.....	299,419,790 (5.2)	Held on deposit for policyholders and beneficiaries.....	323,281,234 (5.7)
Public utility bonds.....	795,849,372 (14.0)	Dividends and annuities left on deposit with the Society at interest.....	130,044,178 (2.3)
Railroad obligations.....	321,420,938 (5.1)	Policy claims in process of payment.....	28,191,420 (0.5)
Industrial obligations.....	1,480,552,334 (29.5)	Premiums paid in advance by policyholders.....	85,105,097 (1.5)
Other bonds.....	151,531,351 (2.7)	Dividends due and unpaid to policyholders.....	6,703,102 (0.1)
Preferred and guaranteed stocks.....	90,455,467 (1.4)	Alotted as dividends for distribution during 1951.....	80,650,408 (1.4)
Common stocks.....	8,642,995 (0.2)	Other Liabilities	
<b>Mortgages and Real Estate</b>		Taxes—federal, state and other.....	17,891,000 (0.3)
Residential and business mortgages.....	738,444,759 (13.0)	Expenses accrued, unearned interest and other obligations.....	8,789,419 (0.2)
Farm mortgages.....	150,933,941 (2.6)	Reserve for revaluation of Canadian and other foreign currency accounts at free market rates of exchange.....	13,617,000 (0.3)
Home and branch office buildings.....	10,573,799 (0.2)	Surplus Funds	
Housing developments and other real estate purchased for investment.....	129,056,089 (2.3)	To cover all contingencies.....	359,256,902 (6.3)
Residential and business properties.....	6,997,068 (0.1)	<b>TOTAL</b> .....	\$5,701,864,966 (100)
<b>Other Assets</b>			
Cash.....	68,135,232 (1.2)		
Transportation equipment.....	38,497,145 (0.7)		
Loans to policyholders.....	142,478,440 (2.5)		
Premiums in process of collection.....	48,119,219 (0.8)		
Interest and rentals accrued and other assets.....	44,052,280 (0.8)		
<b>TOTAL</b> .....	\$5,701,864,966 (100)		

\* Including \$5,274,463 on deposit with public authorities.

In accordance with requirements of law all bonds subject to amortization are stated at their amortized value and all other bonds and stocks are valued at the market quotations on December 31, 1950, as prescribed by the National Association of Insurance Commissioners.



For a more detailed statement of The Society's operations during 1950 write for a copy of the President's Report to the Board of Directors.

**The Equitable Life Assurance Society of The United States**

Thomas I. Parkinson • President

393 Seventh Avenue • New York 1, New York



## Is your Pension Plan KEEPING PACE WITH THE TIMES?



We frequently find that the pension plans we review are no longer working as originally intended. *Has your own plan kept pace with the social and economic changes of the last few years?*

We have helped companies in almost every field of business revise their pension plans to meet today's needs efficiently. A J&H representative will be glad to call on you, without obligation, to discuss your own pension plan.

Send for a copy of our new illustrated guide to successful pension planning.

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*This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Debentures. The offer is made only by the Prospectus.*

**\$60,000,000**

### The Borden Company

**Thirty Year 2½% Debentures Due 1981**

Dated March 1, 1951

Due March 1, 1981

Interest payable March 1 and September 1 in New York City.

**Price 100% and Accrued Interest**

*Copies of the Prospectus may be obtained from only such of the undersigned as may legally offer these Debentures in compliance with the securities laws of the respective States.*

**MORGAN STANLEY & CO.**

**KUHN, LOEB & CO. THE FIRST BOSTON CORPORATION**

**WOOD, STRUTHERS & CO.**

**BLYTH & CO., INC.**

**GOLDMAN, SACHS & CO.**

**SMITH, BARNEY & CO.**

**LEHMAN BROTHERS**

**HARRIMAN RIPLEY & CO.  
Incorporated**

March 7, 1951.

to go out among the farms checking on the growing amount of chattel mortgages on cattle, machinery, and equipment.

In 1940 Melvin seized a chance to strengthen his grip on the farm business. A seven-county farmers' market was opened in Syracuse under state sponsorship. Farmer friends suggested to Melvin that he open a branch right at the market; that would save them bucking traffic to reach the main office. Melvin agreed; and the Merchants' Regional Market Office has proved a mighty profitable affair.

• **Auction Service**—In the same year, Melvin originated a Farm Auction Service. He knew that most farmers had their capital tied up in land, buildings, equipment, and stock. He knew, too, that when they wanted to liquidate their holdings, they could only do it by selling out to a speculator, who usually took advantage of the situation.

The bank's auction service—for a fee—relieves the farmer of all the dreaded details of such a sale. It tends to the advertising, provides a luncheon for prospective bidders, and sees that the best possible prices are secured. A Merchants' representative always attends the sale, just in case a buyer wants to arrange financing for the purchases. Over the years this service has brought direct earnings and goodwill.

Farmers haven't been Melvin's only new-business targets. He has also taken aim at city folk, especially in the modest income brackets. Merchants set up the first local personal-loan department. Another first was in providing 10¢-a-check, no-minimum-balance accounts.

• **Drive In**—The parking problem soon drew Melvin's attention. To give the public a break, he put in a main-office drive-in banking window in 1940. It was the first such installation east of the Mississippi. In 1949 he followed this up by establishing upstate New York's first complete drive-in branch (picture, page 120).

Small conveniences as well as large ones drew Melvin's attention, as witness these other local firsts:

• Specially designed "left-hand" checks for southpaw clients.

• A system by which the bank pays monthly utility bills for its clients, to save them the bother.

• Classes on financial subjects to give housewives a better grasp of our economic system.

To carry out all these programs, Melvin has greatly expanded the bank's staff. When he took over there were 35; now the figure is 170. The staff has been built up very carefully, with an accent on college degrees for key personnel. Of the 24 officers today, 19 have B.A. degrees, seven of these have law degrees as well.

## Capital Reshuffle

Pittsburgh Steel calls Class B preferred, pays off arrears, and opens way for dividend on common stock after 20 years.

Stockholders of Pittsburgh Steel Co. were joyful this week. Pittsburgh's directors have just arranged to pay off a stack of back dividends on preferred stocks. That clears the last of the roadblocks that have prevented common stock dividends for the last 20 years.

The directors' action was the final step in a series of moves initiated by Pittsburgh's new president, Avery C. Adams, who came to that job just about a year ago. Now Pittsburgh will not only be able to pay common dividends, but it will have \$260,000 less preferred dividends to pay each year than it did before Adams got started.

• **Merger**—Not least important, the simplification of its capital structure should put Pittsburgh in a better position in the merger discussions now going on between the company and Allegheny Ludlum Steel Corp. (BW—Jan. 27 '51, p25).

Pittsburgh Steel has three preferred issues: (1) a 5½% prior preferred, on which the company has been paying dividends since 1941, (2) a Class A 5% preferred on which some back dividends had been cleaned up, but which was still \$25.63 in arrears, and (3) a Class B 7% preferred, which had accumulated \$136.50 in unpaid dividends.

Last week the directors announced a special dividend that paid off the last arrears of the Class A preferred. They called the Class B for redemption on June 1 at \$260 a share, including the call price of \$120 and all unpaid dividends to that date.

• **Background**—Sparkplug of this capital reshuffle is Adams, who replaced Joseph H. Carter as president. Carter, whose forte is operations, became board chairman. Adams brought a long steel sales background to Pittsburgh Steel. He came over from the executive vice-presidency of Detroit Steel Corp., previously had been a sales v-p at different times for U. S. Steel Corp., Inland Steel Co., and General Fireproofing Co.

The time was ripe for a recapitalization. Pittsburgh was starting to cash in on the plant improvements that had been made over the last 15 years. And sales were beginning to outpace the disappointing results of 1949. In June, just a few days after fighting started in Korea, Adams and Carter kicked off with a voluntary recapitalization plan, offering exchanges of common and prior preferred to holders of

## Serving Industry Through Hydraulics



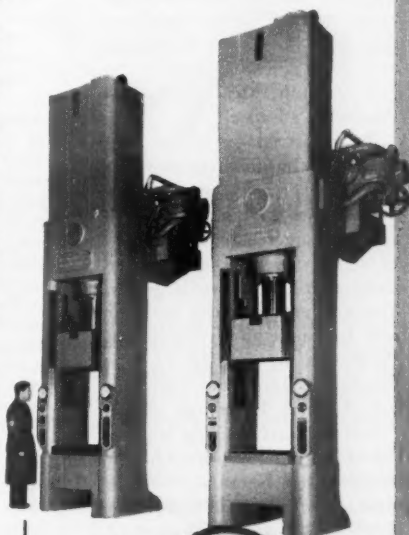
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with shell and  
case  
manufacture?

• There's an H-P-M press designed for just about every type of ordnance production job. Thru two World Wars, H-P-M engineering and manufacturing "know-how" has been applied to problems that the production of ammunition presented to manufacturers. Result . . . H-P-M can build a complete line of presses for shell forging, nosing and testing, cartridge case cupping, drawing, tapering and heading.

As for past records: In World War II, H-P-M Presses carved out new records in quality shell and case production—held rejects to new low minimums—ably met the rugged schedules of wartime America. Today, H-P-M's reactivated Ordnance Equipment Department can give manufacturers, who plan to bid on ordnance contracts, vital press costs and production rates.

Whatever your production problems in America's "rearming" program, H-P-M's "know-how" can help you. Call or write us today.



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- Die Casting Machines
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Industrial Expansion...



Since 1945, Pittsburgh leads all the nation's metropolitan areas in industrial expansion—with \$147,211,000 in industrial building contracts, an additional investment of \$518 for each production worker in the Pittsburgh area. Here is further proof of the faith which industry has in Pittsburgh's future.

As industrial expansion continues, new business opportunities are created... smaller companies prosper in supplying the specialty needs of larger corporations... all businesses grow and thrive along with the industrial giants. You can get the facts on your new business opportunities in Pittsburgh by writing to The Pittsburgh Industrial Development Council, Pittsburgh 19, Pa.

And for your banking requirements in Pittsburgh, think of Peoples First National. With an intimate knowledge of this metropolitan area, and 18 offices located all around town, we are in an excellent position to serve your needs.

**PEOPLES FIRST  
NATIONAL**  
BANK & TRUST COMPANY

Pittsburgh 30, Pa.

Member F.D.I.C.

the prior preferred and Class A preferred issues.

• **Without Cost**—By the time the offer expired in December, enough exchanges had been made to reduce the par value of outstanding preferred by over \$4.5-million, cut arrears on the Class A preferred by around \$2.7-million—all without paying out a nickel.

The company's record-breaking profits helped a lot. In 1950 Pittsburgh earned more than \$6-million after EPT—more than seven times its 1949 net. That put enough cash in the till to finish the job fast.

## Battle for Stock

Consolidated Textile lures  
stockholders of Bates Mfg. with  
a new trade offer. Bates counters  
with extra dividend.

Consolidated Textile Co., Inc., has stepped up its drive to get more of the common stock of Bates Mfg. Co. (BW—Jan. 6 '51, p90). Consolidated, one of the smaller cotton manufacturers, would improve its position if it got control of Bates, a better-known weaver. Last week the Securities & Exchange Commission cleared an issue for Consolidated of 220,000 shares of capital stock. Consolidated plans to offer this to holders of Bates common at 11 shares for 10 of Bates.

• **Biggest Block?**—If it trades every share of this new issue, Consolidated will boost its holdings of Bates common to about 24%. That would be by far the largest block of common held by any Bates stockholder. Consolidated already holds about 13% of Bates stock that it has been buying on the open market for the past year.

• **Worried**—Lester Martin, president of Consolidated, says he is not out to change Bates' management, that he wants only a "limited" amount of the common for investment purposes. But Bates' executives are worried, naturally. They're doing their best to persuade stockholders to resist Martin's blandishments and stick to the fold.

• **Morale Boosting**—Around the turn of the year, when word first came out that Consolidated was planning a capital stock issue, Bates countered by declaring a 350% stock dividend. At the same time, stockholders voted a change in the bylaws that will prevent any major change in the directors of the company for a couple of years, at least.

Last week, right after SEC cleared Consolidated's new issue, Bates again countered by declaring a 40¢ quarterly dividend—including an extra of 15¢—on its new stock. In the same quarter last year, Bates paid out only around 11¢

per share (figured on the new basis).

• **Outside Opinion**—At the same time, Bates called in Ebasco Services, Inc., financial consultants, to study the merits of the Consolidated stock-trade offer. Ebasco concluded that Bates stockholders who exchanged their holdings for Consolidated stock would not be in so good a position as they were as direct holders of Bates stock. Ebasco felt that the Consolidated stock had "lower earning power," among other things.

On last-published balance sheets, Bates' stockholders could make their own comparisons. Bates common had a book value at yearend of \$16.82 a share, compared to \$14 a share for Consolidated last Aug. 31. On that basis, 11 shares of Consolidated would be worth \$154, while 10 shares of Bates would come to \$168.

• **Close on the Market**—On the more realistic basis of market value, however, the difference is not so noticeable—not at the moment. Some Bates stockholders were willing to take \$19.25 a share early this week, as against a market of \$17 bid, \$17.25 asked for Consolidated stock.

Martin says that his company's position has improved materially since Aug. 31. One reason: capital gains on Bates stock, which Martin says were acquired at an average price of \$8 a share.

Both companies are now going great guns on sales. Bates' sales are reported to be up about 30% so far this year over the same 1950 period. Martin says Consolidated sales were up about 35% in its second quarter, which ended Feb. 28.

If holders of 200,000 shares of Bates accept his offer, Martin says each share of Consolidated will have 45/100 of a share of Bates common behind it. He says his company probably will distribute all Bates dividends, in addition to those it declares on its own earnings.

## Did Young Buy Control Of Western Pacific?

Did the James Foundation of New York, Inc., make a deal with Robert R. Young, or didn't it?

The foundation will say nothing, but Young says that it did. He contends that it signed a contract on Feb. 8 to sell to his Alleghany Corp. and associates 153,165 shares of common and 55,727 shares of preferred stock of Western Pacific R.R. Co. To back up his stand—and to get James to deliver the shares—Young said last week that Alleghany's counsel had been authorized to bring suit against the foundation.

• **Working Control**—At stake is the working control of a railroad system that has been a sensational profit maker since it came out of a reorganization a





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*says the Paperwork Pirate*

**R**EPETITIVE writing costs money. Hours of costly clerical work weigh heavily on the debit side of your profit picture. But there's an easy way to make the Paperwork Pirate walk the plank. With Addressograph methods, you can help your workers to be more productive, help them reduce overtime . . . you can cut your costs.

The Addressograph writing method boasts three prime advantages . . . *speed, accuracy and economy.* Speed, so essential to efficient office management, is phenomenal. You can write from 30 to 50 times

faster with Addressograph than with ordinary methods. Accuracy is assured. Descriptions, names, figures are written again and again with never an error. As for economy, when you can write up to 5,000 words in one minute, costs nose-dive to an absolute minimum.

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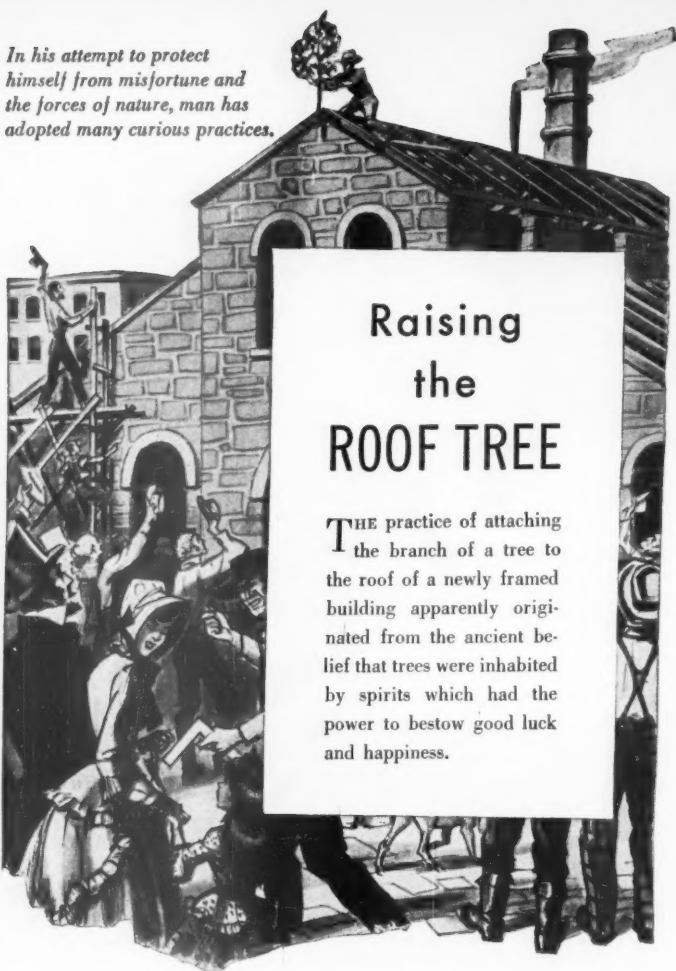
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*In his attempt to protect himself from misfortune and the forces of nature, man has adopted many curious practices.*



## Raising the ROOF TREE

THE practice of attaching the branch of a tree to the roof of a newly framed building apparently originated from the ancient belief that trees were inhabited by spirits which had the power to bestow good luck and happiness.

TODAY, businessmen, their architects and engineers specify CONTRACT BONDS for sure protection against loss due to non-completion of a contract. If you have a new project under consideration have our agent in your community arrange this vital protection for you. Call him *before* your specifications are drawn up!

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few years back. The shares involved represent 27% of all the voting stock that Western Pacific has outstanding. And that's certainly more than enough for control where Young, a past master of shoe-string control, is concerned. His Alleghany Corp., for example, has maintained working control of the Chesapeake & Ohio system for years, even though its direct holding in the carrier is only a 2.5% voting interest.

• **Cross-Country Carrier?**—Whether or not Young wants Western Pacific because of some new plan for an Atlantic-to-Pacific carrier, Wall Street doesn't know. But it's keeping a close eye on its stormy petrel. For it has seen Young do in past deals what nobody thought he had a chance to do.

### FINANCE BRIEFS

\$200-million financing in common stock, preferred stock, and debentures is being considered by Celanese Corp. of America. About half will be new money, the rest will refund outstanding issues. A good-sized share will probably be privately placed. Celanese wants to expand facilities.

• **Class I railroads** boosted their January earnings more than 400% over January, 1950, according to Assn. of American Railroads estimates.

• **Fire insurance companies**, long at odds over the question of how to rate multiple-location risks (BW-Jan. 6 '51, p.92), have agreed to let each other alone. Each of two groups had been trying to block a rating plan proposed by the other. Now both will adopt their own plans.

• **National banks** sold \$111-million of new stock during 1950 and increased capital shares by \$46-million in stock dividends, says the Comptroller of the Currency. The comptroller estimates that in 1950 national banks added \$300-million to capital by retaining some of their earnings.

• **The draft will hurt** Harvard's finances, says the university. By 1953 tuitions will have dropped \$700,000 a year, which can be met "for at least a few years" out of reserves.

• **Youngstown's new tax** on corporate profits will be tested in the courts. Leading local companies claim it's unconstitutional to tax their profits 1%, while unincorporated businesses and individuals get off with 3/10 of 1%.

• **Fire losses**—\$688-million last year—were up 3.1% over 1949, according to the National Board of Fire Underwriters.

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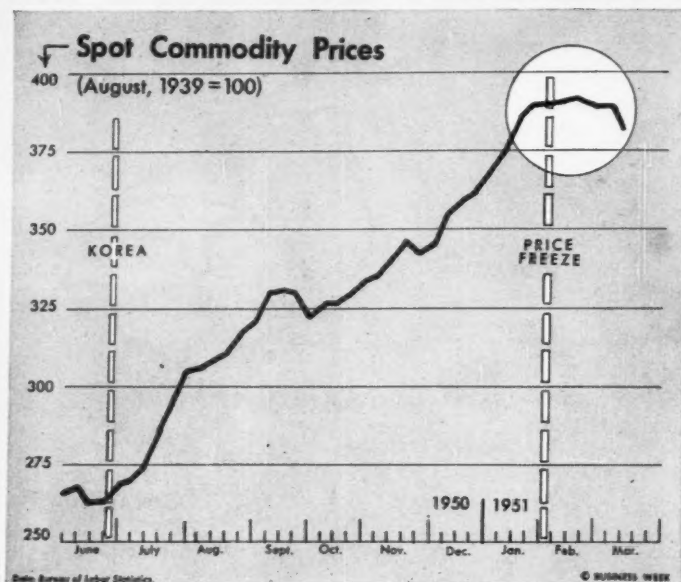
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# THE MARKETS



## Raw Materials Freeze Holds

Wholesale price averages actually dip on spot markets; but that's largely due to tobogganing of tin. Even farm prices show decrease, despite absence of ceilings on them.

That price freeze that no one took very seriously isn't doing too badly—at least at the spot market level. Consumers may not say so much for retail prices, but basic raw materials have gone nowhere, on the average, for the last six weeks.

In fact, the average took a deep dive last week (chart). But that's deceiving. Most of the dip was due to the nose-dive in tin prices after the U.S. stock-pilers stepped out of the market—and before this week's decision that the government would become the sole tin purchaser for this market (page 36).

• **Farm Products**—Aside from tin, most interest has centered in the products of this country's farms. The reason is obvious: Most of them are not subject to price ceilings. That leaves leeway for prices to move either up or down—which is a rare thing these days (BW-Feb. 3 '51, p. 82).

Just how rare may be seen in the many markets where the quoted price is the ceiling price. That is, buyers are willing to go that high but are forbidden by the Office of Price Stabilization to go any higher. Sellers, in some cases, aren't willing to let their hold-

ings go that low. The result is that these markets are purely nominal.

This has been the case much of the time in two imported products—wool and burlap.

• **Active Sales**—Another type of market is that in nonferrous metals. Here the ceiling price also is the going quotation. But these markets are not nominal. Domestic producers of the metals are willing to sell at the ceiling, and users are glad to pay that price. Sales are being made as usual—but there is scant room for speculation in futures.

In most farm products, however, there is room to trade. In fact, many of these materials have shown in the last few weeks that the price road isn't a one-way street.

• **Wheat Pileup**—This has been notably true of grains in recent trading. Wheat, corn, and soybeans, for example, all have been under selling pressure. Wheat has been peculiarly affected. The first selling was touched off when it was found that more of this bread grain had been sold for export than could conveniently be handled at port facilities or loaded on ships.

This shipping and storage congestion



resulted in an at least temporary market glut. And gluts never are good for the cash market.

As to the prospects for wheat prices later on, the crop news more recently has been better. Much of the dry area in the southern Great Plains has received fairish amounts of moisture—not enough to carry the winter wheat crop through to harvest but enough to tide it over. That has resulted in some selling of new-crop futures. Corn and soybeans may have sold off, in sympathy with wheat.

• **Large Plantings**—And there is the over-all proposition that plantings of most crops will be large this year. The government has asked farmers for all-

out production of most foods and fibers. The result, if weather is favorable, will be big yields. And big yields will tend to drive many prices down to the government's support level instead of letting them advance to the point where ceilings can be slapped on.

Many observers feel that numerous commodity markets are vulnerable due to overbuying, whether by speculators, processors, or consumers. Some look, in turn, for later improvement in prices—when present inventories have been worked off. They feel that the inflationary trend has been interrupted rather than abolished, that prices are likely to resume their upward march—perhaps when least expected.

## "Korean Market" Profits Have Slimmed Lately

INDUSTRIAL COMMON STOCKS	Pre-Korean Level	Korean-Market High*	Recent Level	Bull Market Maximum	Market Gains Recently
Dow-Jones Average	224.35	255.71	245.88	14.0%	9.6%
Allied Chemical & Dye	\$62.00	\$65.50	\$61.50	5.6	\$0.8
American Can.	114.75	110.00	106.00	\$4.1	\$7.6
American Smelting & Refining	54.50	80.37	72.75	47.5	33.5
American Tobacco	68.25	68.87	61.50	0.9	\$9.9
American Woolen	26.00	46.87	41.37	80.3	59.1
Anaconda Copper	32.12	44.50	39.75	38.5	23.8
Bethlehem Steel	38.00	60.00	53.62	57.0	41.1
Chrysler Corp.	80.00	\$84.50	77.00	5.6	\$3.7
E. I. du Pont de Nemours	80.00	92.75	88.37	15.9	10.5
General Electric	49.12	56.62	54.75	15.3	11.5
General Foods	50.37	48.62	44.50	\$3.5	\$11.7
General Motors	48.62	\$54.75	51.37	12.6	5.7
Gimbel Bros.	18.00	24.87	20.37	38.2	13.2
B. F. Goodrich	32.92	48.62	46.00	47.7	39.7
Gulf Oil	72.00	91.87	88.00	27.6	22.2
International Harvester	28.37	37.37	35.12	31.7	23.8
Johns-Manville	49.00	57.62	54.50	17.6	11.2
Radio Corp.	22.00	20.00	18.87	\$9.1	\$14.2
Sears, Roebuck & Co.	47.87	58.00	55.87	21.2	16.7
E. R. Squibb	36.75	43.00	42.50	17.0	15.6
Standard Oil (N. J.)	78.25	105.00	102.75	34.2	31.3
Swift & Co.	37.00	\$40.62	34.00	9.8	\$8.1
Union Carbide & Carbon	49.00	59.37	54.62	21.2	11.5
United Fruit	64.25	73.62	68.00	14.6	5.8
United States Rubber	44.00	59.37	55.50	34.9	26.1
United States Steel	36.00	47.75	42.12	32.6	17.0
Westinghouse Electric	36.00	38.37	36.25	6.6	0.7
Zenith Radio	63.75	71.50	64.62	12.2	1.4
UTILITY COMMON STOCKS					
Dow-Jones Average	43.95	43.91	42.65	\$0.1	\$5.0
Cleveland Electric Illuminating	\$45.37	\$46.75	\$45.25	3.0	\$0.3
Commonwealth Edison	32.00	30.00	29.12	\$6.2	\$9.0
Consolidated Edison	32.75	31.87	31.25	\$2.7	\$4.6
Detroit Edison	23.87	23.62	22.87	\$1.0	\$4.2
New England Electric System	12.75	12.75	12.50	...	\$2.0
Pacific Gas & Electric	35.37	34.75	33.87	\$1.8	\$4.2
Philadelphia Electric	27.00	28.62	28.50	6.0	5.6
Southern California Edison	36.00	35.25	34.25	\$2.1	\$4.9
Southern Co.	12.25	12.25	11.37	...	\$2.2
RAILROAD COMMON STOCKS					
Dow-Jones Average	55.85	90.08	81.42	61.3	45.8
Atchafalpa, Topeka & Santa Fe	\$118.25	\$177.75	\$159.25	50.3	34.7
Atlantic Coast Line	46.75	82.00	69.75	75.4	49.2
Chesapeake & Ohio	27.00	38.25	33.12	41.7	22.7
Great Northern (Pfd.)	35.87	57.75	50.37	61.0	40.4
Illinois Central	41.00	75.25	63.75	83.5	55.5
Louisville & Nashville	37.75	59.50	51.37	57.6	36.1
New York Central	13.50	26.25	21.25	94.4	58.1
Pennsylvania	16.00	26.25	21.37	64.1	33.6
Southern Pacific	53.75	74.37	65.12	33.4	16.8
Southern Railway	36.75	64.00	54.25	74.1	47.6
Union Pacific	85.12	109.50	99.25	28.6	16.6

\* Highs so marked were recorded in 1950; all others registered in 1951. † Loss, not gain.



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# LABOR

## Labor's Mobilization Victory

Besides wage concessions, it wins pledge that enlarged WSB will settle pay disputes affecting defense. Industry balks at Johnston's proposal that board also handle nonwage disputes.

Labor has won a substantial—if partial—victory in its fight over mobilization policy. First it got concessions on wages (BW—Mar. 3 '51, p120). Now it has assurances that labor disputes affecting mobilization will be decided by an enlarged Wage Stabilization Board.

• **Big Questions**—At midweek it was practically certain that WSB would be reconstituted as a disputes-settling as well as a wage-stabilizing board. The only questions up in the air—and they were hotly contested questions—were:

How broad a jurisdiction should WSB have over labor disputes?

How will WSB go about handling, and deciding, cases brought before it?

Strong efforts to reach a compromise are being made in Washington. It seems likely that they will bridge the already narrowing gap between labor and industry on these questions.

Two proposals are being considered: one advanced by Economic Stabilizer Eric Johnston, and acceptable to labor but not industry; another proposed by industry representatives.

Johnston suggested giving WSB authority to handle:

• Disputes arising over its own policy or decisions.

• Disputes involving nonwage issues—provided both parties agree to submit them to the board.

• Disputes certified by Truman as apt to cause a national emergency.

• **Short Retreat**—Labor had been standing pat on a demand that WSB handle all labor disputes, regardless of what they involve. It eased off from that position to accept, tentatively, the Johnston formula. It wasn't a big retreat: The compromise proposal doesn't fall too far short of labor's full demands.

For instance, most wage disputes arising during a period of federal pay controls would probably touch on WSB policies or decisions; on these, the board could step in when and where it wanted to. Further, the limitation on WSB authority in nonwage cases would be almost meaningless. Any time an employer balked at letting WSB handle a nonwage case, union strike action could force the case into WSB hands under the "emergency" rule.

• **Industry Balks**—Realizing that this was true, a 20-man industry group re-

jected the Johnston compromise plan.

But in doing so, it made some bargainable concessions. Before, the industry representatives had flatly opposed giving WSB any disputes-settling authority. They shifted a little from that stand, agreeing that WSB should handle squabbles arising out of the "interpretation and application of existing (wage-stabilization) policies." However, they still insisted:

• WSB should not have the right to modify existing policies on a case-by-case basis. If on investigation it should find wage policy changes ought to be made, it should be allowed only to recommend them to Johnston.

• Johnston should be allowed to approve or reject, but not modify, board recommendations.

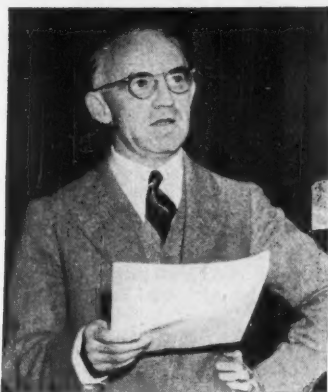
• WSB should be barred from handling noneconomic disputes.

• **Agreement Needed**—Johnston sought at midweek to iron out the differences between his formula and the more limited proposals by the industry group. It was something he couldn't do by fiat, as he had done with the wage concessions—many and big—which he already had made. Johnston has the final word on wages, but not on setting up disputes-settling machinery.

The Defense Production Act requires Johnston, as President Truman's agent, to confer with industry, labor, and public representatives on disputes machinery. It says he must "take such action as may be agreed upon." He can't take any step he can't sell industry.

• **Advisers**—In formulating his compromise proposal, Johnston put a lot of stock in advice from George Taylor and William H. Davis, based on old National War Labor Board experiences. Taylor, particularly, told him it would be hard—almost impossible—to separate wage-control and disputes-settling functions. At the very least, he said, WSB must be allowed to settle disputes arising over its wage policies.

Taylor also told Johnston that, as long as strikes would not seriously impede mobilization, the government should seek voluntary arbitration of nonwage disputes. And it should encourage, but not require, labor and management to let WSB decide issues that they can't settle directly, by collective bargaining.



**MANPOWER ADVISER** Graham has labor's backing, but he's in the wrong spot.

## Graham Appointment Won't End Union Fight

Labor this week welcomed the appointment of former Sen. Frank P. Graham as Defense Manpower Administrator in the Dept. of Labor—but stuck to its demand for an even stronger voice in the over-all manpower program.

Dr. Graham will serve as a top-level aide to Secretary of Labor Tobin and will represent the Dept. of Labor on Defense Mobilizer Charles E. Wilson's Manpower Policy Committee. In that role, says Tobin, he will work for "a voluntary defense manpower program"—and oppose mandatory controls.

He will also head a Dept. of Labor manpower advisory committee made up of representatives of management, labor, and agriculture.

Dr. Graham was on the National Defense Mediation Board in 1941 and 1942 and served on the National War Labor Board from 1942 to 1945. He served an appointive term in the Senate in 1949 and 1950.

Unions regard Dr. Graham as "friendly" and have backed him from the start for a role in the mobilization program. They urged his appointment as chairman of Wilson's Manpower Policy Committee—but Wilson chose Dr. Arthur S. Flemming for the job, and for the even more important assignment as over-all director of the nation's defense manpower program. The unions wanted Secretary Tobin to get that last post. The rebuff is behind the present, unsettled dispute over a voice for labor in the manpower program.

While the unions are solidly behind the Graham appointment, they aren't satisfied that it meets labor's demand—since the Dept. of Labor has been side-tracked by Wilson as far as manpower policymaking is concerned.



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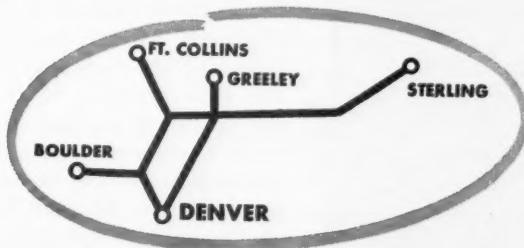
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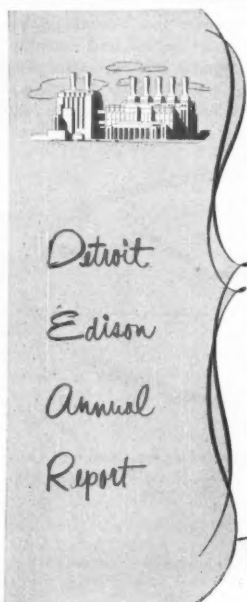
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## Get Together

AFL and CIO representatives to hold first joint meeting since 1936 rift. It's a sign of new operating unity.

For the first time since 1936, representatives of all levels of the AFL and CIO will get together in Washington to discuss a common problem. There hasn't been such a joint meeting since an AFL split brought the CIO to birth.

This latest evidence of operating unity between the two groups will bring together 700 representatives of city, state, and national labor organizations. AFL and CIO people will meet separately at first, then get together on Tuesday and Wednesday.

• **Consumer Defense**—The conference is billed as a "Defend the Consumer" rally. Its goal is to convince the public—and Congress—that labor's cause and the consumer's best interests are one and the same.

The conference is also planned to arrange for joint community-relations programs back home, keyed to the AFL-CIO radio "educational" campaign now under way.

The joint meeting of the rival labor bodies points up two important developments:

• Both AFL and CIO now consider the present wage-prices situation urgent enough to require drastic—and dramatic—action.

• Their rapprochement has reached a stage where collaboration comes naturally.

The conference will bring together grassroots unionists who have been co-operating for the last two years on state and community levels. Merger talks are not on the agenda—but the subject of organic unity is bound to come up, unofficially.

• **Top-Level Group**—Nothing concrete and immediate can be expected to result from such discussions now. The complex work of unifying the two organizations is in the hands of a top-level joint committee—now tied up in mobilization problems, with little time left over for talks on the unity issue (BW—Mar. 3 '51, p. 124).

But this should be remembered: The fact that AFL and CIO have, in effect, achieved operating unity is highly significant; it involves just about as much political, social, and economic cooperation as the groups could achieve by an outright merger.

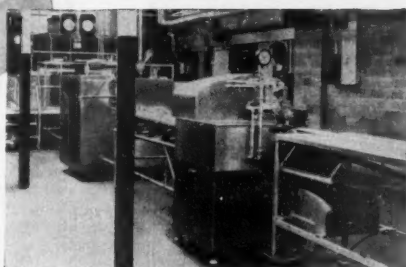
It also means that organic unity may be a great deal closer than formal off-and-on unity negotiations would seem to indicate.



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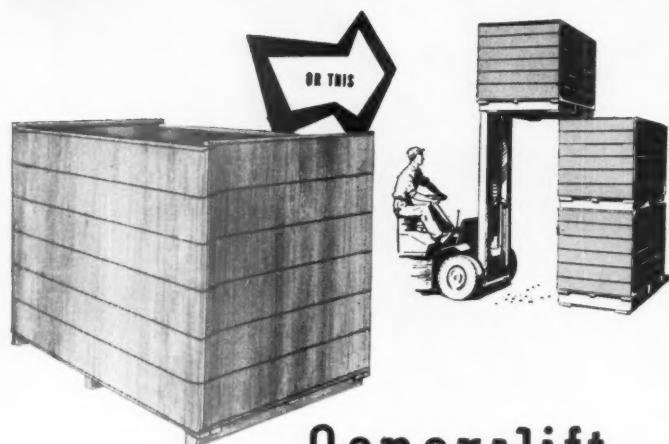
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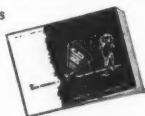
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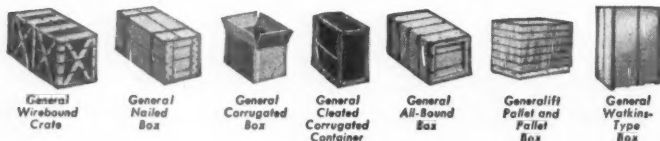
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## UAW Sued

Midland Steel takes it to court to recover \$750,000 in alleged damages from union's slowdown in Detroit.

Detroit's Midland Steel Products Co. went to court last week in its fight against a series of slowdowns and work stoppages by the United Auto Workers (CIO). Midland filed suit for \$750,000 damages from UAW, alleging "illegal" union tactics had caused the company serious business losses.

• **Escalator Started It**—The row between company and union began routinely enough. UAW demanded a Chrysler-type "escalator" contract clause—with cost-of-living wage adjustments and annual improvement-factor raises. Negotiations dragged along, and in mid-February workers began slowdown tactics.

The net effect was about the same as a strike: Workers took it easy, and sometimes halted work altogether, on one production line or in one department each day. That jammed things up so much the company had to shut down the line, or department, or even the whole plant. The next day, the whole procedure would be repeated in a different production line or department.

This pressure brought a quick speed-up in bargaining. Midland agreed to give the Chrysler "package" escalator clause. But then another issue—arbitration as a last step in grievance handling—gummed things up again.

• **Union Opposes It**—Usually, management opposes arbitration as a method of settling disputes, and labor supports it. At Midland, the shoe is on the other foot. UAW is resisting arbitration.

## Slowdown Closes J&L

A "slowdown" by trainmen on the Monongahela Connecting Railroad cut hauling and switching operations this week—and forced Jones & Laughlin to shut down its sprawling Monongahela River works, idling 10,000 steelworkers.

Mon-Con employees are members of the Brotherhood of Railroad Trainmen, now bargaining with the road on a 35¢ demand. When talks started in February, trainmen began adhering strictly to the letter of operating rules set up by Mon-Con. Work slowed down.

The carrier protested the slowdown was ordered by BRT to back its wage drive. BRT called it a "spontaneous safety program." The union said trainmen are "tired of having to run fast schedules and getting blamed for accidents."



MAX KOSSORIS is behind BLS' . . .

## Survey Speedup

**BLS San Francisco office consolidates many government wage inquiries into one operation, thus saving employers' time.**

Government inspectors who come in for a look at the files often produce a slow burn among employers. Sometimes the inspection, because it probes into confidential matters, takes the time of a top-level management man. And usually a small retinue of accountants and file clerks can count on killing a day or two.

• **Twelve-in-One**—In San Francisco the regional office of the U.S. Bureau of Labor Statistics has found a way to slash one time loss for employers by consolidating about a dozen payroll inspections in one. Using the new system, the West Coast office has just completed the field work on a wage survey that should answer the statistical needs of any employer, public or private, in the San Francisco area.

As in the four other cities where the bureau has regional offices, the San Francisco office, headed by Max D. Kossoris, makes periodic wage surveys. These surveys fill the need for wage-rate data on which local private employers and unions can rely when they sit down to discuss a new contract.

What Kossoris has done is consolidate with his survey those made by a dozen other governmental agencies—federal, state, and local—that are required to pay going rates to workers.

• **Danger of Leaks**—Lost time is only one thing that makes employers gripe at opening their files to a succession of investigators. The danger of disclosure



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FOOD SERVICE MANAGEMENT SINCE 1930

of intimate labor-cost secrets is another.

Last year that danger edged perilously close to reality in San Francisco. City officials adjusted municipal pay scales to conform with results of a confidential city survey of private wage rates. City workers weren't satisfied that the new scales really mirrored rates in private industry. They sued for a look at the records.

Private companies intervened to protect their secret data, and Kossoris injected BLS into the scrap as a friend of the court. He argued that disclosure would make it tough for his survey teams to get information in the future.

• **BLS Is Immune**—The city still hasn't squeaked out of that one. Although the issues are now academic, the case is pending on appeal. The city insured against any repetition by "hiring" BLS to do its survey. BLS records are immune from state courts.

The litigation over disclosure was largely responsible for the consolidation of surveys in the San Francisco area. For two or three years, a dozen state and local agencies had pooled their energies in wage surveys. They were as vulnerable to disclosure as the city was. They asked BLS to take over.

A BLS team under John Dana, staff analyst, conducted the first consolidated survey for this group last year in conjunction with the regular BLS survey. The participating agencies were: the University of California, the counties of Alameda, Contra Costa, and San Mateo, the cities of Oakland, Berkeley, and San Leandro, the Port of Oakland, the East Bay Municipal Utilities District, and the state Dept. of Industrial Relations.

• **Cost Divided**—Each pays a share of the cost of the consolidated survey, either in cash or by providing personnel. Surveys are much cheaper when a lot of agencies foot the bill. San Francisco paid BLS \$3,500; that compares with a \$12,000 cost when handled directly.

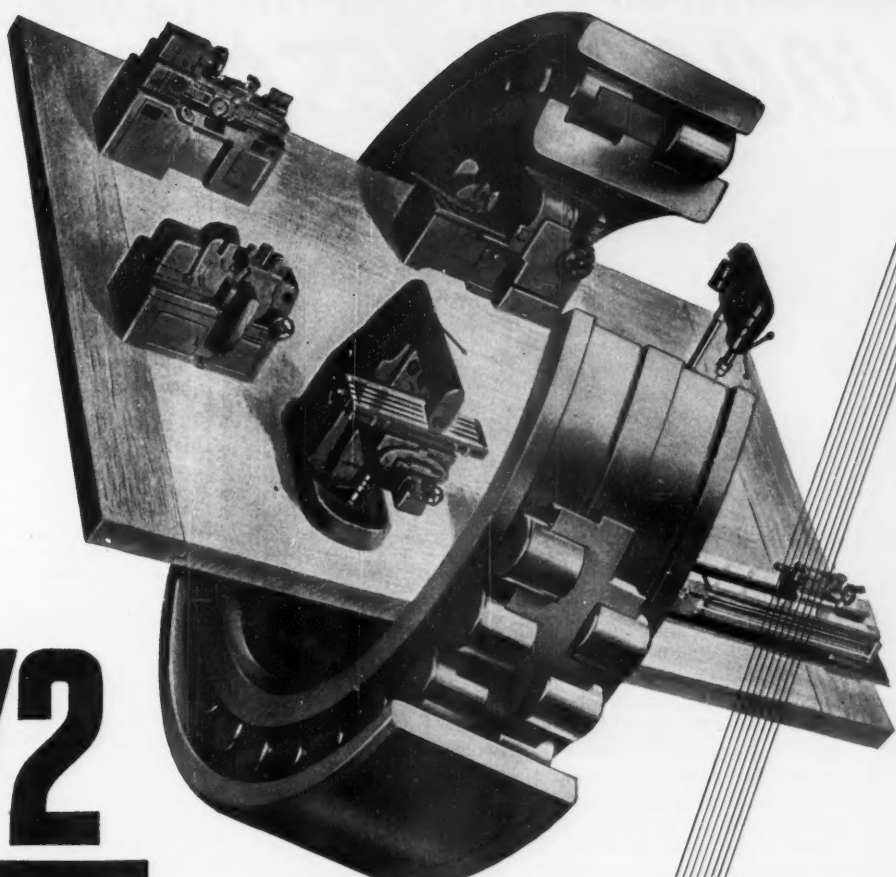
This year the Army and Navy, both major employers of civilian labor in the San Francisco area, joined the consolidated survey. With them went the U.S. Mint, the Air Force, the General Services Administration, and the Bureau of Reclamation.

Kossoris' men can't do all the necessary survey work for all these agencies in one turn around the course. For one thing, different agencies and different employers want the information at different times of the year.

• **Master Survey**—BLS meets these peculiar needs by running a master survey in the fall, then following it up in early spring by a telephone check to the 250 companies covered in the master survey. The telephone survey is quite perfunctory. Its only aim is to see if a firm has granted a general wage increase since the master survey.



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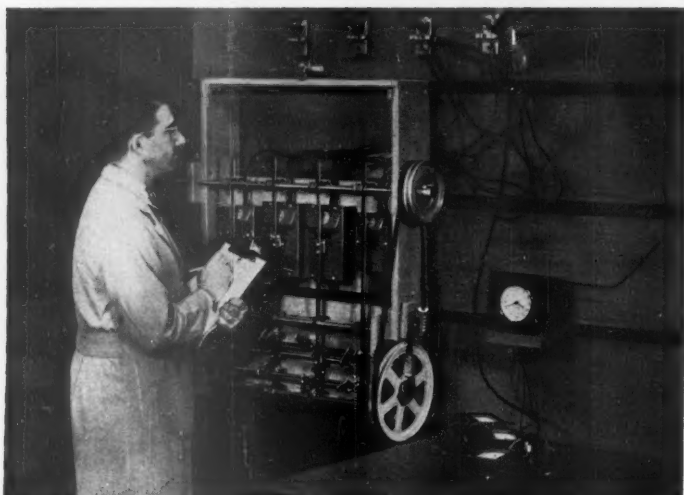
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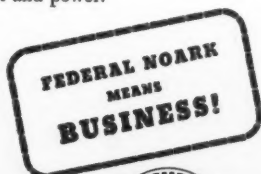
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## Let WSB Do It

Employers are now willing to settle quicker on demands for raises, knowing federal rules will fix the amount.

More and more, employers are giving up their rights to collective bargaining. The tendency is to rubber-stamp union demands and let Washington do the worrying. This buck-passing marks a return to the 1941-1945 era, when the National War Labor Board ruled the roost.

Should the Wage Stabilization Board get dispute-settling powers, this trend will start snowballing.

• **Lumber Settlement**—Latest example of lame collective bargaining in a major industry is the settlement reached last week in the Pacific Northwest lumber and plywood industry. Employers there agreed to a 7½¢-an-hour wage boost—about 4½¢ more than the permissible raise under the present 10% ceiling on raises since Jan. 15, 1951.

The employers also agreed to help get WSB approval for the increase.

The Lumber & Sawmill Workers (AFL) had demanded the 7½¢ right from the start. Operators countered, at first, by offering to raise pay the maximum amount permitted under the government wage program. Since the union got a 15½¢ raise in 1950 and has an average hourly wage of \$1.85, that figured out to a 3¢ raise.

Labor balked. Some mills and bargaining associations then agreed to the full 7½¢ raise, subject to WSB approval. Mills that refused to go along on that were struck Feb. 26.

• **Business Booms**—The stoppage caused a boom in business for the mills still in operation. So more and more of the holdouts gave in. They were certain that it didn't matter what they signed up for, anyway, in view of government controls.

Last week the Lumbermen's Industrial Relations Committee, bargaining agent for the last big group of mills, suggested an immediate 3¢ raise and 4½¢ more when the government approved it. Labor again said no. So the committee released its members to sign on union terms if they wanted to. They did—and the strike ended.

The Pictures—Cover by Bob Iscar. Harris & Ewing—19, 131; K. Hutton, Pix Inc.—150; Int. News—20, 25, 148; Bob Iscar—42, 44, 45, 96, 97; Dick Wolters—80, 118, 120; Wide World—21.

## LABOR BRIEFS

A strike truce sent 25,000 CIO steelworkers back to their jobs at Tennessee Coal, Iron & Railroad Co. in Birmingham. Mills shut down two days last week when 4,200 striking TCI ore miners picketed the gates. The union got the miners to go back to work by promising to negotiate job reclassifications.

A bus walkout ended in seven western states when AFL drivers employed by Greyhound got a 10% raise.

Rubber wage demands will be drafted by a CIO rubber workers' wage conference about May 1. The union says the amount now allowed under federal wage controls isn't enough. Meanwhile, it has threatened to strike against Goodyear on Apr. 1, unless the company agrees to other union demands.

"Ceiling" raises are being given widely by management to bring employees up to levels set by federal wage rules. A typical one: Esso Standard Oil Co. and Standard Oil Developing Co. last week raised employees' pay to 10% above Jan. 15, 1950, levels—adding 4% to a 6% raise given last year.

Atom-plant labor cases will be handled by NLRB, even if an employer's business is local and not "absolutely essential to . . . the community." (Normally, the board won't touch local disputes.) NLRB ruled that a small laundry in Hanford, Wash., is "so identified with the government's defense program as to warrant full exercise of the powers" given the board in a labor case.

An acquittal last week freed UE organizational director James J. Matles of contempt-of-Congress charges, brought because he refused to answer House investigating committee questions on communism. A federal district court held Matles was legally entitled to refuse on the ground of possible self-incrimination.

A CIO drive against the left-wing UE in the Schenectady (N.Y.) General Electric plant is due soon. CIO's IUE will argue that UE's contract—which has no "escalator" clause—handicaps workers during a period of federal wage curbs.

A 37-day strike ended at American Locomotive's Schenectady plant when 4,000 workers accepted an average raise of 16¢ an hour. If approved by WSB, the raise will be retroactive to Jan. 15, 1951.



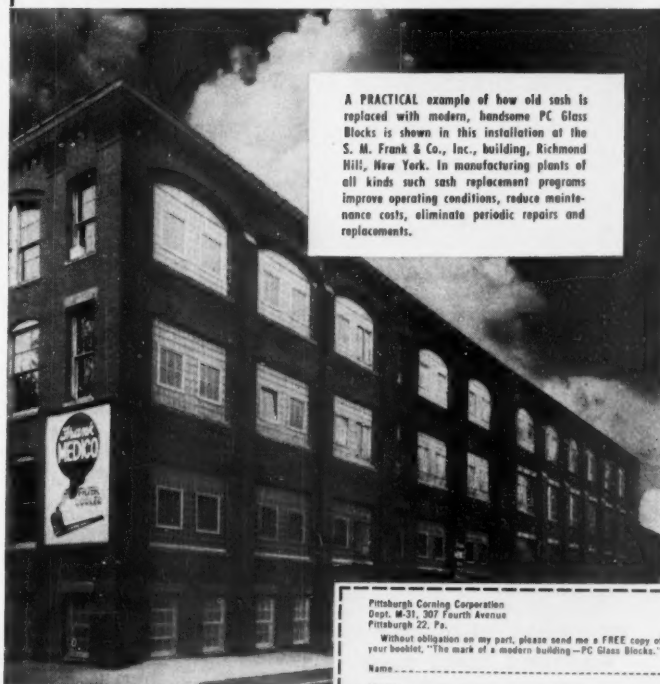
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## Burroughs Drive

**Auto union tries against odds to organize Detroit adding machine manufacturer that has defied attempts since 1930's.**

At Burroughs Adding Machine Co., Detroit, United Auto Workers (CIO) is going all-out to organize the largest nonunion plant in heavily unionized Michigan, and one of the largest in the country. Its campaign, now at a National Labor Relations Board election stage, is about the strongest in 15 years of union efforts to sign up Burroughs.

Burroughs' main factory is just four blocks from UAW's international offices. Its employees work and live in an area that's a hotbed of CIO unionism. In the current drive, UAW organizers first approached them eight months ago. Since then, UAW has made some organizing progress; no other union ever got so far as asking for an NLRB election.

• **Success in Doubt**—But there is a lot of doubt that UAW will succeed where other unions have failed badly.

UAW is gambling heavily on getting a representation vote confined to the 6,000 employees in the Burroughs main plant. But the company wants the vote taken among the 8,000 employees of all three of its plants in the Detroit area. It argues that it has always treated all the workers as one group on its records and that they should therefore be joined in any bargaining unit.

NLRB currently is studying the two arguments. Conceivably, the way it decides might mean victory in one plant, or defeat in all, for UAW.

• **First Round**—The real effort to organize Burroughs was made in the 1930's by the Mechanics Educational Society of America—an aggressive independent union in Detroit and Cleveland. MESA once thought it was making real headway at Burroughs, promising workers that, if they'd sign up, the union would get them a 6¢ raise. The company cut the ground out from under MESA by a 10¢ raise.

• **Second Round**—United Electrical, Radio & Machine Workers (ex-CIO) tried for years to organize Burroughs workers. Its appeals and promises got nowhere. After the split in the electrical workers' union, UE kept at its off-and-on organizing. And UAW decided to swing into action.

Technically Burroughs is in International Union of Electrical Workers (CIO) jurisdiction, not UAW's. But IUE is weak in Detroit. So UAW moved in, instead.

UE—knowing it can't beat UAW this time—is inclined to string along

with Burroughs' demand for a single bargaining election for all three plants. Apparently fearful of ever getting a toehold in Burroughs if UAW wins, UE would rather have Burroughs non-union than a UAW shop.

• **Not Union-Minded**—On whatever basis an election is held, odds are against UAW. It is up against strong, highly successful company policies at Burroughs. These aren't paternalistic policies, but practical ones. They apparently have kept Burroughs employees from becoming union-minded.

For example, Burroughs started paying time-and-a-half for overtime work in 1904 and made company-paid insurance available to employees in 1907. It began paying premium rates for night work in 1926 and set up a paid-vacation plan in the same year. It started giving paid holidays in 1936 and sick-leaves with pay in 1949. Burroughs set up a liberal pension plan last year.

Burroughs employees are also highly pleased with the continuity of their jobs. Hills and valleys of employment, commonplace in the auto industry in Detroit, are nonexistent at Burroughs plants. Jobs are just about as stable as anywhere in the country. For instance, the average Burroughs employee last year had 12 years' service credits—as compared with 10 or less for employees in most Detroit auto plants.

• **Few Layoffs**—Employees give Burroughs a lot of credit for this. The company had never had any appreciable layoffs until right after World War II—when a swollen work force had to be cut to peacetime levels.

## GE Employees Strike, Plant Closes—for Good

General Electric's transformer plant in Oakland, Calif., had been a trouble spot for years. It was losing money, and it had the worst production record in the corporation.

• **Last Try**—Last fall GE proposed an incentive-pay plan aimed at boosting production and putting the Oakland plant on a self-sustaining basis. Local 1412 of the United Electrical, Radio & Machine Workers (ex-CIO) turned down the proposal. UE's 200 members in the plant struck last October.

The union refused to yield ground during scores of meetings, and despite government efforts at conciliation.

• **Enough's Enough**—Last week, after a month's warning, GE did what many employers threaten and precious few actually do. It quit. The company closed the plant "permanently"—ordering the equipment dismantled and sent to other plants. It blamed the long strike and inability to negotiate higher productivity for its decision to close up.





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IN A WORLD faced with constant food shortages in so many countries, more "green thumbs" are needed!

Here in America, modern agricultural methods have increased farm production 60% in the past generation—even though today there are 20% fewer workers on the farms. This increased yield means plenty of food for every one here—and more besides. And the same methods, applied in other countries, would help answer world food needs.

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**How a manufacturer of shower heads used just one SPEED NUT per product and made a 6% material savings...cut machining costs...increased production rate 5 times...and eliminated special assembly equipment.**

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# INTERNATIONAL OUTLOOK

BUSINESS WEEK

MARCH 17, 1951



In Paris, London, and Washington the betting favors Big Four talks—despite all the bickering over the agenda.

But U. S. and British diplomats, unlike their French colleagues, aren't so optimistic about the end result. They see no real signs that Moscow is ready yet to change its menacing policy.

This won't happen, Washington and London say, until the West has built up more strength.

The real danger now, by this reckoning, is a letdown in the Western defense effort. And that could start right here in the U. S.

Settlement talk from two world trouble spots—Korea and Germany—already has Congress wondering whether we were too scared a month or so back. Lack of leadership from the White House doesn't help, either.

As a result, big chunks may be lopped off the Administration's defense and foreign-aid programs.

Raw material problems have the French and British worried stiff.

In France it's largely a matter of high prices. And French officials are desperately looking for a general leveling off. Otherwise, they say France is in for a runaway inflation—and continued political instability.

Higher prices already have stirred France's three big labor federations (two are anti-Communist) into action. They were laying plans this week to get nationwide wage boosts. If the federations are successful, there's no way France can escape a disastrous inflation.

The big problem with Britain is the shortage of key raw materials. This is as serious a threat to the British economy today as the dollar shortage was two years ago.

Sulphur and cotton are two things the British need most. And London has been prodding Washington for weeks now to get bigger supplies.

So far Washington hasn't been able to do much about the British demands. Take sulphur. After our exports were cut back recently, the British asked for an allocation of 30,000 tons. But it's hard for Washington to pry even 10,000 tons away from U. S. industry, though total U. S. consumption is about 4-million tons a year.

You can get some solid tips on a new U. S. foreign-aid setup from Nelson Rockefeller's report on Point 4, just out.

Rockefeller's outline for a single foreign-aid agency—a U. S. Overseas Economic Administration—reflects official thinking right down the line.

The Administration will push another Rockefeller proposal, too—that Congress O.K. \$500-million for technical assistance and capital grants to underdeveloped countries. This will be included in the Administration's next foreign-aid budget.

In some points, the Rockefeller report goes way beyond the ideas of Washington's most global-minded planners.

For one, Rockefeller suggests that the U. S. plump for an International Development Authority, attached to the World Bank. All free nations would contribute to the authority's kitty. Then the money would be parcelled out in grants-in-aid around the world.

Several foreign governments already have tried this idea out on the State Dept. But State turned it down cold, arguing that you can't marry an

# INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MARCH 17, 1951

international-grants operation to an international-loans operation. The loaning agencies would be out of business in no time.

Private investment abroad—originally meant to be the key to Point 4—gets some attention in the report, too.

Rockefeller doesn't think the development job can be done unless U. S. business invests about \$2-billion a year abroad, double the postwar rate.

As an incentive, Rockefeller urges that new investments get exemption from U. S. taxes. (Once the present emergency ends and the Treasury can stand the loss of revenue, the exemption would go to existing investments.)

Don't expect any great shakeup in foreign-aid operations right away, though. There'll be plenty of bickering over details first.

The State Dept. is the biggest obstacle—afraid it will lose control over foreign policy. The Rockefeller report recommends that the administrator of the new foreign-aid agency report directly to the President.

There's no question that State's influence would be pared if Rockefeller's ideas were adopted. State would still make broad policy. But the new agency would do the day-to-day deciding on economic questions.

Rockefeller wants the new agency to control the flow of U. S. exports. Most Washington officials agree heartily.

"Exports are now our most effective instrument of foreign policy," says one top official. He predicts that all U. S. exports will be allocated soon.

To do that job, the various agencies now dealing with foreign requirements must be welded together. That would make it simpler for the Administration to divert more for export.

Generalissimo Franco is having some sleepless nights.

The general strike in Barcelona this week is the most serious uprising the Spanish dictator has yet faced. More than 250,000 people took part.

The workers are demonstrating against booming living costs. It isn't likely that the Communists set off the trouble, as Madrid officials claim. But you can bet the Moscow men will make propaganda hay out of it.

The U. S. will ask the Japanese to produce for Western defense.

Washington is placing orders in Japan for precision instruments, optical goods, radar equipment, and the like. The idea is to get some benefits, after all the money the U. S. will have to dig up for Japan's own rearmament.

Before Korea, U. S. planners hoped that Japan could get on its feet by producing goods for Southeast Asian development.

Rearmament has killed that scheme. As a matter of fact, the U. S. subsidy to Japan will keep rising, rather than go down (BW-Mar.3'50,p133).

Peron's hounding of the newspaper "La Prensa" has muddled official relations between Washington and Buenos Aires.

Both Peron and the State Dept. want the recent improvements in U. S.-Argentine business relations to continue. But State may have to bow to an outraged public opinion in the U. S., take a firmer line towards Peron.

Peron has fulfilled some of the commitments he made to U. S. businessmen last year. But he's dragging his feet on two: a U. S.-Argentine investment treaty; and a long-term commitment allowing American oil refineries in Argentina to import dollar crude oil.



# BUSINESS ABROAD



FOCUS of conflict is Anglo-Iranian's Abadan refinery, the biggest in the world.

## West Could Lose Iran's Oil

Fanatical nationalists, egged on by Soviet, want to take over Anglo-Iranian Oil. At worst, this could mean war. At best, probably means British will have to split profits 50-50 with Iran.

The British are old hands at doing business in Iran. They have had plenty of experience in dealing with local politics and with Russian pressure. But a storm blew up in Teheran last week that will take all London's diplomatic finesse and probably some of Washington's, too. At stake is the giant Anglo-Iranian Oil Co. and a big part of Western Europe's oil supply.

Fanatical nationalists, backed by Russian stooges, are bent on taking over Anglo-Iranian lock, stock, and barrel. Because he stood in their way, Premier Ali Razmara was assassinated. The assassin's cry, "Long live Islam, death to the oil company," reflects the Nationalist passions now loose in Iran.

True, the Shah and his new premier, Hussein Ala, don't want to take any sudden and drastic action against the British-owned oil company. They think Iran would lose more than it would gain from such a move. But the problem is whether the government is strong enough to stave off nationalist pressure.

• **Tinderbox**—If it comes to civil war, Iran could well be the place where

World War III finally gets its start.

If the Shah can't keep the peace, Britain might have no other choice than to move troops into southern Iran to protect the oil fields and the Abadan refinery. Western Europe can't afford to lose Anglo-Iranian; such a loss would cripple its economy, drastically curtail the military potential of the West.

And if British troops move in from the South, it's a cinch that Russian troops would pour across the northern frontier. (Moscow would try to justify this on the basis of a 1921 treaty with Teheran.)

But London and Washington aren't thinking in such terms yet. They both believe the Shah can control the situation long enough for a settlement to be worked out.

• **Not What It Was**—Even so, it's clear already that Anglo-Iranian's position in Iran will never be the same again. Probably the best settlement the company can hope for is a 50-50 split of profits, roughly what Arabian-American Oil Co. has in Saudi-Arabia and Creole Petroleum has in Venezuela. And it's

possible that the only deal that will satisfy even the moderates in Iran now is some sort of joint setup in which Iranians would share in ownership of the company.

• **Iran's Stake**—There's no doubt about AIOC's importance to Iran. It's by far the largest industrial enterprise in the country and provides about 15% of the government's total income. Besides, AIOC contributes more than 60% of Iran's foreign exchange, including most of its dollar income.

The company's output in Iran alone during 1950 was 670,000 bbl. a day, most of it refined at Abadan. (Aramco's output in Saudi-Arabia was 550-thousand bbl. a day last year.) Add AIOC's output in Iraq, Kuwait, and Qatar, and the company's total crude output was almost 1-million bbl. a day. Total sales last year are estimated at above \$1-billion.

• **Development**—AIOC's present commanding position has been built up over 50 years. The first concession was obtained in 1901—60-year rights in return for a piddling \$20,000 and 16% of future net profits. Production started in 1911. Then in 1914 the British government bought a controlling interest in the company.

Needless to say, the relations between the company and the Iranian government haven't always been smooth. AIOC had a major crisis in 1932 when the Teheran government temporarily canceled its concession. A new agreement in 1933 extended AIOC's rights for another 60 years. But this agreement came under attack soon after the end of World War II, and by 1948 the company had been forced to negotiate again.

The company and Teheran came to a supplementary agreement but failed to get it through the Majlis, Iran's lower house. This brought the stalemate that the nationalists now are trying to break by simply taking over Anglo-Iranian.

• **Iran Complaints**—When the Iranian government asked for a new deal in 1948, its chief complaint was that the income it got from Anglo-Iranian was too low. Actually, Teheran looked longingly at Venezuela, where the profits from oil are divided between the oil companies and the government on roughly a 50-50 basis. And Teheran didn't like the fact that the British government got more out of AIOC in taxes than Iran received from both taxes and royalties.

The Iranians had other complaints, too. They blamed AIOC for not making more oil available in Iran itself and for asking too high a price for what it did sell. At the same time, the company sold its oil to the British Navy at a reduced rate, thus cutting Iran's income. Also Iranians charged that AIOC's balance sheets kept most of the

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essential facts and figures hidden. Then there were complaints because Iranian nationals have not been given enough responsible jobs and because the company hasn't done enough for Iran's general economic development.

• **AIOC Concedes**—But Anglo-Iranian's 1949 offer went part way in meeting these complaints. The company upped the basic royalty by 50%; raised the special royalty it paid in lieu of income taxes; gave Iran an annual cut (instead of an accumulated cut payable in 1993) from the company's general reserves; agreed to sell its products within Iran for 25% instead of 10% under the world price. This offer was to be retroactive to Jan. 1, 1948.

Under this supplementary agreement, AIOC would have paid Iran £22.9-million for 1949, as against £13.5-million under the old agreement. For operations up to Jan. 1, 1950, the company would have made back payments totaling £24-million.

• **Iran Rejects**—If AIOC had made such an offer a year earlier, probably it would have got through the Majlis. But by the time the agreement was initiated two things had happened: Opposition had grown in Iran to the whole idea of foreign control; and it was known in Teheran that a new oil agreement was pending in Saudi-Arabia.

In fact, it was only a few days after the government withdrew the agreement from the Majlis that Aramco announced its new arrangements with the Saudi-Arabian government. Under this deal, Aramco continues to pay a royalty of four gold shillings a ton. In addition, the American company pays an income tax up to an amount that would, together with the royalty, be equal to half the net operating income of the company after payment of U. S. taxes.

• **For Comparison**—There's no way of making an exact comparison of what Anglo-Iranian offered and what U. S. companies pay under their 50-50 arrangements. But the following figures tell at least part of the story:

In 1949 Creole Petroleum paid the Venezuelan government a total of about \$150-million in royalties, taxes, etc. The company's net income for the same year was \$116-million. Output for the year was 590,000 bbl. a day.

In 1949 Anglo-Iranian's output (including Iraq and Kuwait) was approximately the same as Creole's. Its trading profit on all operations was £38.7-million. Under the supplementary agreement it would have paid the Iranian government £22.9-million. (AIOC paid the British government £23-million in taxes.)

• **What Won't Work**—As things look now, a British offer putting payments on a comparable basis with Aramco's and Creole's would not calm things down in Iran today. National emo-

tions have become too high-pitched to make such a deal possible, at least right away.

Nationalization doesn't make any sense, either. How could Iran find the technicians to operate AIOC's facilities, or replace AIOC's tanker fleet and worldwide trading network, or sell Iranian oil on world markets for rials instead of sterling?

• **What Might Work**—According to Walter J. Levy, New York petroleum consultant and former head of the ECA petroleum division, what's needed now is an impartial review of the whole situation so that a basis for negotiations will exist when the time comes for talks to start again between AIOC and the Iranian government.

As Levy sees it, a review of Anglo-Iranian's operations would establish such facts as these: What is the just share of AIOC's income that Iran should get, taking account of the company's long period of successful operation?

What kind of arrangements are necessary to keep AIOC competitive in the world oil market? What further contributions can AIOC make to the Iranian economy, say by providing cheap and ample oil to the country and by setting up byproduct industries such as fertilizers? Does a fixed royalty arrangement, such as AIOC has proposed, offer as much to Iran as the fluctuating 50-50 arrangements U. S. oil companies have made abroad or as much as a combination of the two?

Once facts like these are ascertained, Levy thinks, it should be possible to work out a settlement between AIOC and the Iranian government.

**BUSINESS ABROAD BRIEFS**

**To the cleaners:** To save the government money, British banks are cleaning, pressing, and reissuing worn bank notes instead of replacing them with new ones.

• **A new feeder airliner**—made in Canada—will make its U. S. debut soon. Wiggins Airways, Boston, has bought several of the 10-passenger Doves from DeHavilland of Canada, Ltd., Toronto, for short hauls in New England.

• **South Africa reports:** The government is pushing a \$50-million scheme to extract oil from coal. M. W. Kellogg Co., New York engineers, will act as consultants and contractors for an oil-from-coal plant to be erected by South Africa Coal, Oil & Gas Corp. at Coalbrook. . . . Germany's Heinkel automobile firm will build a factory near Johannesburg to manufacture cars and tractors.



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COMMUNIST THUGS, seeking to block arms shipments, are losing the . . .

## Hot War on Europe's Docks

Free workers, organized with U. S. union help, slug back and break the Red grip on waterfronts. Shipments are moving now, but all-out conflict might bring a sterner test.

Communist strength is on the wane among the dockworkers of Western Europe's ports. Where once the Reds were so strong that they could practically dictate what goods could move and what could not, they now face an organized, militant opposition. And that opposition owes a heavy debt—in money, advice, and personnel—to U. S. labor, particularly the AFL.

It takes more than just slogans and pep meetings to break the Communist grip on the docks. From Cherbourg to Marseilles, to Genoa and Naples, to Piraeus in Greece and Haifa in Israel, and back around to the North African ports, shadowy action committees—the vigilantes—are mobilizing. Their goal: to throttle Communist influence on the docks and protect inbound ships and cargoes for Europe's defense. Their weapons: "fists and cargo hooks, if we need them to do the job."

• **International Ties**—AFL comes into the picture through the International Confederation of Free Trade Unions and the International Transportworkers Federation (an ICFTU affiliate). AFL's European representative, Irving Brown, is masterminding the attack. Already, he's earned himself the nickname "Scar-

face Brown, henchman of the State Dept." in the Communist press.

Americans who wonder what an AFL representative is doing in Europe forget that trade unionism is an international movement. For years AFL has fought the Communist-controlled World Federation of Trade Unions, which for a long time was the only international federation. Right after the war, AFL set up a Free Trade Union Committee specifically to help anti-Communist European union leaders fight off WFTU organizers.

In 1949 WFTU split wide open. Then AFL joined with the British Trade Union Congress and the CIO (until then a WFTU member) to set up the rival International Confederation of Free Trade Unions.

For the past year, ICFTU has been pushing a program to break up WFTU all over the globe under the slogan: "Broad-Freedom-Peace." It's managed to weaken the Communist hold on Latin America's unions, and gathered recruits in Australia, Africa, India, Tunisia, and Japan. Today, the federation has over 53-million members, in more than 60 nations.

It's through the ICFTU that the



U. S. federations are working in Europe. Irving Brown, the generalissimo of the fight on the docks, is an official of both AFL and ICFTU. The lion's share of his financial support comes from AFL's Free Trade Union Committee.

## I. Battle of the Ports

In some areas, the "battle of the ports" has already been fought and won. The Marseilles waterfront—once a Communist fortress—is a good example. A year ago, the party held 54 seats on the port's stevedore committee; now it holds 10.

The battle came to a head over the delivery of U.S. arms aid to Europe. Months before the first shipment arrived last April, Communists outdid themselves with a barrage of razzle-dazzle propaganda—threatening, wheedling, waving the banners of "Peace." Communist bosses in Italy and France confidently predicted that the "American guns would be dumped into the Mediterranean"; one bigwig promised civil war should the police try to suppress Communist demonstrations.

• **Posses Organized**—But as far back as 1948, AFL's Brown and the International Transportworkers had begun undermining the Communists on the docks. They borrowed a leaf from communism's book of terror tactics, recruited a "hard core" of their own: highly mobile posses of rugged dockers, backstopped by semiprofessional street-fighters. Anti-Communist or lukewarm workers—the little guys who had always been kept in line by Communist toughs—screwed up their courage.

At one point, Pierre Ferri-Pisani, secretary of France's anti-Communist seamen's and dockers' union and Brown's sidekick on the waterfront, marched up to the top Communist maritime leader in France and laid it on the line: "If you go on breaking my boys' jaws, we won't bother beating up your boys—we'll come right to you." After that, every now and then one of the party faithful would wind up in the hospital—or would get an unexpected dunk in the tarry backwash around the piers.

• **Strike Fizzled**—When the time came for the first arms aid shipment, the dockers were thoroughly aroused, more resentful than ever against Kremlin dictation. The first shipload arrived in Naples on Apr. 11, 1950—and a highly advertised Communist general strike fizzled badly. Sixty-four dockers—members of the free trade union group—went right ahead and unloaded the ship—without incident.

The same thing happened the next day in Cherbourg, where France's first boatload of arms arrived. Despite party threats, the dockers had already voted

to unload—and proceeded with no trouble.

• **Indo-China, Too**—The Communists also lost their fight to halt arms shipments from France to what they call the "dirty colonial war in Indo-China." Once France's Communist-run General Confederation of Labor had to offer bribes to get maritime workers to strike against loading arms.

There's still a lot of work to be done before Europe's waterfront is "secure," though. The transportworkers have just set up a "Mediterranean Committee," to organize anti-Communist cells in major ports of Italy, Greece, Israel, Egypt, Tunis, Morocco, and Algeria. There's special emphasis on the North African ports—now that the Western allies are stepping up the rehabilitation of airports and other installations there.

## II. Pulled Punches

Irving Brown and the European free trade union leaders are quick to admit this: The real test of their fight will come only if there's a full-blown crisis, or war. There's evidence that the Communist leaders have pulled their "hard core" out of the ports fracas, holding it in reserve rather than have it beaten up by vigilance committees. When orders come from Moscow, though, the local leaders will throw in everything they have in an effort to paralyze the West's shipping.

But the vigilance committee has foreseen that possibility and has spotted its own "inside" men on the docks and on ships. Where the Communists have four or five men planted aboard ship ready to take over, so do the vigilantes.

• **If War Comes**—And though they're ably blocking peacetime sabotage, the anti-Communists still have to prove to the European worker that they can take care of him on such things as wages, working conditions, and inflation control. The fact of the matter is that force—along the lines of the vigilance committees—is effective only where it has the firm support of the majority of people concerned. Right now, that support is there: The rank and file of Western Europe's workers are fed up with Communist terror and indignant at Communist attempts to use the trade union movement to further Stalin's imperialism.

But when the Communist-controlled unions are allowed to soft-pedal political agitation and to champion workers' economic grievances, they may partially counteract the influence of free labor's action committees. For example, a recent attempt by France's CGT to tie lowered living standards and a booming inflation to rearmament has won some new recruits. There's real danger if inflation bites further into the minimum subsistence level of French workers.

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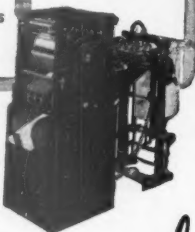
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## Britain's Little Cyclops

Ernie Bevin's hard-hitting, brainy successor has been a foe of communism since way back. A life-long Socialist politician, he still believes in mixed economy and paying for what you get.

Last week Britain got a new Foreign Secretary, 63-year-old Herbert Stanley Morrison. The Western world wondered: Would Morrison stand as firmly against Russia as his predecessor, Ernest Bevin?

Moscow knew the answer. The Kremlin's files would show that Morrison had been a bitter enemy from the start. In the early 1920's, almost every leader of the British Labor Party looked on Soviet communism as just another version of their own socialism. Not so Herbert Morrison, who had taken the trouble to study Karl Marx.

On the day Morrison was appointed, the British press used the following adjectives to describe him: nimble, shrewd, sensible, cautious, practical, amiable, ruthless, honest. The British press also praised his dexterity at political maneuvering, skill in compromise, and appeal to reason. His friends say that he can take a problem, however big, and his mind will snap on it like a machine. Before he lets go, he has a complete grasp of it.

• **Boss of London**—All this faithfully depicts "Our Herb," London's political

boss since 1934, and Labor's leading campaign strategist and parliamentary tactician. But Morrison is more. While lacking the sticky soulfulness that the British call "sincerity," Morrison has real intellectual ability, firm principles, and great courage. London observers predict that he will make at least as good a Foreign Secretary as Ernest Bevin did.

London is Morrison's world, although he knows France well and loves it and has crossed the Atlantic twice. He was born in 1888 in a London suburb, where his father was a policeman and his mother a former housemaid. Three days after birth he lost his right eye in an accident, later was teased in school. But Morrison never showed any chip on his shoulder as a result.

• **Give and Take**—Thus Morrison's start in life was as humble as Ernie Bevin's. But by temperament and experience Bevin and Morrison differ profoundly.

Bevin built a rocklike stubbornness by beating his way up through a dockworkers' union. Morrison developed his shrewdness and adaptability in the give

and take of London politics. He has never been anywhere but in politics. He started out in 1915 as secretary of the London Labor Party and held that job for 32 years.

In guiding British foreign policy, the new secretary will rely on intellect rather than the instinct that Bevin largely did. It's this fact that makes many British trade unionists distrust him.

When he has to fight, Morrison likes to do it quietly from his desk or a public platform. But he never shirks rough and tumble stuff if that's the rule of the game. He never forgets and rarely forgives; rebels get treated rough in due time. He has stayed a man of the people throughout. But he's a great believer in strong leadership and has always felt that he was the man to lead the Labor Party. Despite his lack of support from the labor union wing of the party, Morrison's personal grip on the party machinery is very strong.

• **Effective Rule**—Morrison isn't underrated even by those Laborites who mistrust him. He was the man who showed that Labor could rule effectively. Two outstanding achievements gave him this reputation: (1) the unification of London's transport network when he was Minister of Transport, 1929 to 1931; (2) the vast extension of public housing in metropolitan London when he headed the London County Council, 1934 to 1940. Morrison is given credit, too, for getting the new Waterloo Bridge built just before World War II.

When Churchill formed his wartime coalition government in 1940, Morrison became Minister of Supply. Shortly afterward, he was made Home Secretary and Minister of Home Security. When Labor came into power in 1945, he became Lord President of the Council and Deputy Prime Minister.

• **No Doctrinaire**—Morrison has never been a doctrinaire Socialist. Instead, he can claim to be the chief philosopher of the mixed economy. He has never believed that Labor can hold power without support from the middle class; he thinks that Britain's economy should remain 80% in the hands of private enterprise. He has backed the welfare state but always said that its "benefits must be paid for."

Morrison has the Londoner's genuine affection for Parliament and its tradition. In this respect he is almost on a par with Winston Churchill, with whom he clashes regularly in the House of Commons. Like Churchill, too, he believes "in close ties between Britain and the U.S. One thing is certain," Morrison can be counted on to stand up to Stalin. Wordsworth's description of the English daisy fits the Foreign Secretary as neatly as any: "A little Cyclops, with one eye, staring to threaten and defy."

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# Will There Be War?

The most important question facing American business today is: Will there be war? A great deal of fog envelops the question. Mixed in the fog is a perhaps unthinking fear of Russia and its intentions.

Considerable light is thrown on this matter by a new book, "The Operational Code of the Politburo" (McGraw-Hill). This analysis of the political strategy of communism is the work of Nathan Leites, who did the study for the Air Force. It is one man's opinion, but it is worth serious study by every businessman.

BUSINESS WEEK has been examining this question of war-or-no-war, too. Of course, no one can know. The keenest analysis can miss a key fact, and war can come in a most unexpected way. But we, like Leites, think the chance to keep the peace is gaining. That's what a hard-headed canvass of the situation means to us. (We trust the Politburo has the same reaction.)

## Factors for Peace

(1) The U. S. has atomic superiority and should increase its lead. The manufacturing problems are so great that Russia may never approach us in quantity or quality of bombs.

(2) We have naval and air superiority and should hold our lead. It is true Russia exceeds us in numbers of close-support tactical aircraft, but it is also true that we excel her in long-range bombers and warships. Production of U. S. atomic bombers and submarines is on the horizon.

(3) Russia trails us in industrial capacity and productivity. In the realm of technology and methods, it isn't in the same league.

(4) Russian puppets in the satellites are having trouble. There have been purges in Romania, Bulgaria, Hungary, Albania, and most recently in Czechoslovakia. Yugoslavia has rebelled. Italian, French, and even British Communists are showing signs of the unpardonable sin of Titoism. Nationalism is encroaching on communism. All is not well behind the Iron Curtain.

(5) Historically, Russia has stopped when it met opposition. In Iran, Greece, Berlin, and even Yugoslavia, it has not dared use force, apparently because of the fear of all-out war. In Korea, the Soviet is using satellite troops. Russia itself has remained outwardly aloof. The Kremlin has not forgotten the hideous losses of the last war. (Stalin was startled when he saw what the allied bombing did to Berlin.) Russia has not started a "big war" in the 33 years since the Bolshevik Revolution.

(6) The U. S. and its allies are rapidly building up strength. We are showing a willingness to fight and are getting ready. The Kremlin's chance for new cheap conquests has slipped past.

These six facts strike us as solid deterrents to Russia's

starting a war. In addition, there is the clear Soviet policy as laid down by Stalin and Lenin and described in Leites' book—never go too far. That is basic Communist doctrine. The Politburo is made up of the most unscrupulous scoundrels in history. But they are realists, not fools.

All this provides the basis for confidence in our cause, but not for relaxation. BUSINESS WEEK does not for one instant suggest the U. S. begin paring its defenses. Our country and our allies should go ahead steadily and calmly preparing for the worst, while working for the best. The worst may not come. We may be entering a long period of armed watchfulness.

## Impact on Business

For businessmen the meaning of all this is that things other than war may have a bigger place in long-range planning than seemed likely a few months ago. If we are successful in convincing the Politburo of the terrible risks of war, the business outlook will be less dominated by military needs. By the end of 1952, barring war, we should be in a position to turn out an adequate volume of both guns and butter. After that, businessmen will again face the problem of selling their goods. Historically, the ability of this country to consume goods is almost limitless. Waiting, too, will be wide markets for our goods overseas that can be reached by energetic and resourceful men. To problems of that kind, businessmen can well afford to devote at least some of their thoughts today.

## Wanted—A Word

In the propaganda war between Russia and the rest of us, the words "communism" and "capitalism" are weapons constantly in use. "Communism" has been pretty well battered up. But what about "capitalism"? A good many people think it smells of the 19th Century and a moth-eaten system in which too many employers were shortsighted, and too many workers oppressed. Editor William Nichols of This Week says the term is a positive handicap today. He thinks we need a modern word to describe our modern ways.

We wouldn't try to scrap the old word—we like it. But, if for battle purposes it is growing blunt, let's find another word that can help describe our business ways in this country. Something that means the land of the free and the home of the brave, where every man has a chance and a share in what goes on. A warm word that gives the feeling of the American way of productive life. A word that feels good as you say it.

The right word to help make our "capitalism" better understood could be worth many divisions. It could help us tell The American Story to the world.



GREAT IDEAS OF WESTERN MAN: ONE OF A SERIES



## Hobbes on War and Peace

LEVIATHAN, 85

Hereby it is manifest that during the time men live without a common power to keep them all in awe, they are in that condition which is called war; and such a war, as is of every man against every man. For war consisteth not in battle only, or the act of fighting, but in a tract of time, wherein the will to contend by battle is sufficiently known: and therefore the notion of time is to be considered in the nature of war, as it is in the nature of weather. For as the nature of foul weather lieth not in a shower or two of rain, but in an inclination thereto of many days together: so the nature of war consisteth not in actual fighting, but in the known disposition thereto during all the time there is no assurance to the contrary. All other time is peace.

CONTAINER CORPORATION OF AMERICA



ARTIST: LEON KARP

**News about**

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